UNIVERSAL
LIBRARY

OU_164928

UNIVERSAL
LIBRARY

OUP—552—7-7-66—10,000

OSMANIA UNIVERSITY LIBRARY

Call No. 110/.562N Accession No. 451

Author C.E.M. Joad

Title nature life and value

This book should be returned on or before the date last marked below.

MATTER, LIFE AND VALUE

MATTER, LIFE AND VALUE

By C. E. M. JOAD

Author of 'Essays in Common Sense Philosophy'; 'Common Sense Ethics'; 'Mind and Matter'; 'Introduction to Modern Philosophy'; 'Introduction to Modern Political Theory'; 'The Future of Life', &c.

OXFORD UNIVERSITY PRESS
LONDON: HUMPHREY MILFORD
1929

OXFORD UNIVERSITY PRESS
AMEN HOUSE, E.C. 4
LONDON EDINBURGH GLASGOW
LEIPZIG NEW YORK TORONTO
MELBOURNE CAPETOWN BOMBAY
CALCUTTA MADRAS SHANGHAI
HUMPHREY MILFORD
PUBLISHER TO THE
UNIVERSITY

Printed in Great Britain

PREFACE

IN the following pages I have endeavoured to outline a metaphysic which affirms the reality of at least three different classes of entity, matter, life, and objects of value. This view naturally presupposes a thoroughgoing pluralism which involves a denial of the conception that the universe is fundamentally a unity, and many will for this reason alone find difficulty in accepting it. Even those who, like the Monadists, argue for a number of distinct and independent spiritual units as ultimate cosmic constituents, do not envisage a qualitative difference in kind between the units thus affirmed.

The desire to affirm a fundamental unity as the nature of the real has dominated most of the great philosophies since the Renaissance. Swayed by this desire, philosophers have endeavoured to bring the heterogeneous elements presented for their consideration under the aegis of a universally applicable formula, or to exhibit them as aspects of an all-embracing unity. In so doing they have been led, or so it seems to me, to do violence to the variety and complexity of the admitted facts of experience.

Starting with no initial presumption in favour of Monism—for there is no necessary reason that I have been able to find, why the univ[redacted] be or should be reduced to one thing rather than to two, to [redacted] to the square root of minus one—I have been constrained b[redacted] desire to do full justice to every side of our experience, to admit the existence of at least three independent reals. That life exists and cannot be adequately represented as an emanation from or offshoot of matter is, I think, matter of agreement among most philosophers. Even among the scientists, the drift away from materialism, at any rate in its nineteenth-century form, grows yearly more marked. I have started, then, from the presumption that the universe, whatever else it may be, is not wholly material. Now most of those who have been concerned to vindicate the autonomy of life have proceeded to claim that it is all-embracing; the assertion that life is a distinct and in some sense independent factor in the universe,

being merely a preliminary to the further assertion that life monopolizes the universe. Here I have demurred. Apart from an instinctive predilection for a pluralistic view of the universe which makes me suspicious of all entities which are at once exclusive and all-embracing, I number myself among those who regard knowledge as a process in which there is revealed to mind an external world which is other than mind itself. This world, I hold, appears exactly as it is, and, if its appearance is non-mental, if, that is to say, it can be satisfactorily analysed in terms of sense data, there is no reason to suppose that the appearance belies the reality.

Matter, then, is real, and life is an activity which becomes aware of it without either absorbing or transcending it. But life's awareness reveals the existence of other entities besides matter; subsistent objects are known in thinking, and aesthetic experience can only be adequately interpreted on the assumption that it discloses to us, however obscurely, the existence of a realm of value wherein beauty resides.

The unique character of ethical motive constrains us to recognize in goodness another inhabitant of this realm, while the phenomena of mystical experience demand that it shall be further enlarged—possibly, though not certainly, to include deity. Given the fact that life, matter, and value proclaim themselves as distinct and in some sense autonomous reals, each of which resolutely refuses to be resolved into either of the others, my task has been to find accommodation for them within the bounds of a single universe, and to describe the manner of their relationship. The result has led, as might be expected, to a somewhat complex metaphysic, which, in its ready acceptance of theories which are usually entertained by different and even opposing schools of thought, may seem to some to offer a synthesis of a number of different positions only at the cost of omitting what is valuable in all of them. In other words, in trying to make the best of a number of worlds, I may be charged with failing to find a foothold in any. If this should be the case, I am sorry, but I cannot help it. I have cemented the bricks into my structure as best I may, but I cannot bring myself to dispense with any of them.

As to the charge of complexity I am less disposed to apologize. I know of no reason why the universe should necessarily be of such a kind as to appear simple to the human intelligence. On the contrary, it may well be not only more complicated than we know, but more complicated than, at our present level of knowledge, we can possibly suspect; in fact it seems *probable* that it is.

My thanks are due to Miss Stebbing for kindly reading through the whole book in manuscript, and for making many valuable suggestions, and to Professor Alexander for reading and commenting upon Chapter VI. Part of the matter contained in Chapter VII originally appeared in the form of an article in the *Journal of the Institute of British Philosophical Studies*, and I am indebted to the editor for permission to reprint it here.

C. E. M. JOAD.

HAMPSTEAD.
June 1928.

CONTENTS

PREFACE v

SYNOPSIS OF THE ARGUMENT . . . xiii

PART I

LIFE AND THE MATERIAL WORLD

I. VITALISM AND MATERIALISM.

Introductory 3

I. The Materialist Hypothesis . . . 5

II. The Evidence against Materialism . . 13

(1) The behaviour of living organisms . . 13

(2) The abstractions of scientific method . . 17

(3) The relation between animate and inanimate matter 21

(4) The evidence from biology . . . 23

(5) The evidence from psychology . . 27

Conclusion 28

II. THE CASE FOR PLURALISM.

Introductory 30

I. The Attraction of Monism . . . 31

II. Criticism of Monistic Theories . . . 39

(1) Theological Monism . . . 40

(2) Philosophical Monism . . . 46

A. Idealistic Monism. The Universe as Thought . 47

B. Vitalistic Monism. The Universe as Change . 60

Summary of foregoing Argument . . 77

The need for a further factor . . . 77

III. KNOWLEDGE AS AWARENESS.

Introductory 80

I. Forms of Realism 82

II. Perception as the Awareness of Sense Data . 90

III. Thought as the Awareness of Subsistent Objects . 101

(1) Criticism of current views . . . 102

(2) The Theory of Subsistent Objects . . 119

Appendix. The Formal Theory of Truth and Error . 136

IV. THE VITALIST HYPOTHESIS.

I. Preliminary Sketch of Position . . . 138

(1) The relation between life and body . . 139

(2) The purpose of life . . . 144

(3) Evolution as progress in awareness . . 147

(4) The method of evolution . . . 155

II. Life's Development through Emergence . . 157
(1) The meaning of emergence . . . 157
(2) Dr. Broad's theory of emergence . . 159
(3) Criticism of Dr. Broad's theory . . 161
(4) An alternative theory of emergence . . 167
(5) Material limitation as the condition of development 170

III. The Nature of Life 177
(1) The impossibility of defining life . . 180
(2) The impossibility of knowing life . . 181
(3) Life as purposive 185
Summary of Argument 187

IV. The Status of the Individual . . . 188
(1) Life as the sum total of individual monads . 189
Digression on alternative conceptions of the relation between life and the individual monads . 192
Objections to the view of life as the sum total of individual monads . . . 197
(2) Life as a principle transcending the monads . 199
Free Will and Matter 203
Appendix. The practical import of Vitalism . 207

V. THE INSTRUMENTS OF LIFE.

I. The Significance of Genius 218
Introductory 218
(1) The definition and function of genius . . 220
(2) The function of literature . . . 227
(3) Reception of the genius . . . 234
(4) Illustrations 238

II. The Function of Poetry . . . 241
Summary of Argument 260

PART II

LIFE AND THE WORLD OF VALUE

VI. AESTHETICS AS THE AWARENESS OF BEAUTY.

Introductory 265

I. The Objectivity of Beauty 266
(1) Subjectivist accounts of beauty . . 267
(2) Beauty as objective 275

II. The Significance of Music 283
(1) The characteristics of significant music . 286
(2) The characteristics of non-significant music . 292

III. The Function of Art 299
Conclusion 305

VII. ETHICS AS THE AWARENESS OF GOODNESS.
Introductory 310
I. Utilitarian Theories 312
II. Naturalistic Theories 314
III. The Intuitive Apprehension of Goodness . . 320

VIII. VITALISM AND TELEOLOGY.
Introductory 325
I. A Changeless or a Changing Universe . . 326
(1) Reality as changeless . . . 327
(2) Reality as change 329
(3) Change and Permanence are both real . . 330
II. The Argument for Discontinuity . . 334
(1) Criticism of the exclusively changeless real . 334
(2) Criticism of the exclusively changing real . 339
Teleological and *ab origine* types of explanation . 344
III. The Nature of Value 353
(1) Criticism of subjective theories of value . 353
(2) Theory of value as objective . . 358
(3) The testimony of the mystics . . 363

IX. THE GOAL OF EVOLUTION.
I. Vitalism and Indian philosophy . . . 370
II. Final Statement of Position . . . 375
III. The Artist, the Poet, and the Mystic . . 392
(1) The artist 392
(2) The poet 400
(3) The mystic 405
An allegory 410

ERRATA

Page 89, l. 30, *for* mind *read* and
292, l. 3 from foot, *delete* I have
293, l. 26, *for* which in *read* in which
406, l. 18, *for* other *read* others

SYNOPSIS OF THE ARGUMENT

PART I. LIFE AND THE MATERIAL WORLD

Chapters I and II. Demonstration of existence and uniqueness of Life and Matter as two distinct principles in the universe.

Chapter I. Consideration of Materialist position.

(*a*) Statement of classical materialism.

(*b*) Consideration of bearing upon classical theory of recent developments in physics.

Criticism of Materialism from point of view of:—

(*a*) Unique behaviour of living organisms.

(*b*) Mechanizing and therefore falsifying effect of application of scientific method to treatment of vital phenomena.

(*c*) Alleged impossibility of drawing line between animate and inanimate matter.

(*d*) Recent germ-cell theories of heredity and their implications.

Conclusion. Life is a distinct principle, which is neither an emanation from nor an offshoot of matter, nor resolvable into matter. For most thinkers this conclusion leads to view that universe is vital or spiritual through and through. This position, however, not to be maintained in present work because it presupposes a monistic metaphysic. See Chapter II.

Chapter II. Consideration of Monism.

(1) Attractiveness of Monism. Consideration of question of the bearing of the attractiveness of a metaphysic upon its truth. How far the view that the universe is a unity is a necessary presupposition of a philosophic outlook.

(2) Brief sketch of Idealistic Monism.

(*a*) Axiom of internal relations.

(*b*) Doctrine of wholes and parts.

(3) Criticism of (*a*) and (*b*) resulting in Pluralistic metaphysic.

(4) Sketch of Vitalistic Monism, i.e. view that life, mind or experience regarded as active and developing constitutes the

universe. Positions of Schopenhauer, Bergson, and Croce summarized.

(5) Criticism of these positions. Impossibility of deriving either the reality or the appearance of diversity from a homogeneous, fundamental flux or an all-inclusive active, Will.

(6) Conclusion:

(*a*) The universe is not, nor is it the expression of, a fundamental unity.

(*b*) Phenomena of diversity inexplicable on supposition that life and life alone, whether considered as sum of active monadic experiencing units or as thought structure, constitutes the universe.

Hence matter as well as life is real. Hence fundamental Dualism.

Chapters III and IV. Attempt to work out a theory of Vitalism on the basis of mind and matter as distinct but interacting reals.

Chapter III. Consideration of this interaction as revealed in what is called the knowledge relationship.

Presuppositions derived from previous chapters commit us to a Realist theory of Knowledge.

(*a*) Criticism of current forms of Realism which admit the synthesizing or manipulative activity of mind as contributing to the object known. How these theories reduce themselves to Representationalism or to Idealism.

(*b*) Inference that the function of mind in sense experience must be confined to bare awareness of presented sense data.

(*c*) Extension of this view of mind's activity to embrace the process of thinking.

(i) Thinking as the awareness of subsistent objects.

(ii) Theories of judgement and of truth and error on this basis.

Conclusions. (1) There are no mental existents but only mental acts, and these acts reveal to mind the different constituents of the external universe. Mind's relation to external world is, in fact, always one of discovery.

(2) In addition to the material world there is the world of subsistent objects.

Chapter IV. Consideration of life's relation to matter as revealed in interaction between mind and body in individual organisms.

(*a*) General sketch of Vitalist hypothesis.

(*b*) Part played by matter in conditioning and stimulating life's development by imposing limitations on our vital powers, thus engendering need for effort and struggle, by means of which life acquires new faculties.

(*c*) The condition of vital development being material limitation, its method is emergence which results in appearance of 'higher' levels of life.

(i) Criticism of Dr. Broad's theory of emergence.

(ii) As life emerges at higher levels it becomes conscious. Consciousness implies awareness of purpose. Life's knowledge of its purpose develops therefore *pari passu* with the development of the purpose and the advance towards its fulfilment.

(iii) This purpose identified provisionally with the attainment of higher quality life or higher levels of life. Meaning ascribed to higher levels of life in terms of increase in depth and scope of awareness. Life at a higher level is life aware of *more* of the external world and aware of qualities in the external world previously overlooked.

(*d*) Transference at death of faculties acquired by individual monads to the main stream of life, which objectifies itself at a slightly higher level in each generation. In this form we are committed to the acceptance of inheritance of acquired characteristics.

(*e*) Impossibility of defining life or of knowing it. Necessity therefore to use metaphor.

(*f*) Question of Free Will in individual monads; how far this is reconcilable with the existence of a universal stream of life, of which each living organism is a temporarily separated current.

Appendix to Chapter IV. Practical import and effect upon conduct of acceptance of preceding theory.

Chapter V. (1) Existence of Free Will in monads implies ability in them to act otherwise than in accordance with purpose of life. Either they thwart life's purpose by pursuing courses of their own, or they remain passive or even fall back from

level of development previously attained. Consideration of life's contrivances to ensure movement and advance on part of its individual monads.

(2) Of these the most important is the genius, who is sent into the world to give conscious expression to life's instinctive purpose. The genius as the instrument or vehicle of a message that transcends him.

(3) This message delivered through teaching and preaching, which subsequently become drama and literature.

Illustration of thesis that literature is essentially didactic in virtue of the fact that its medium is words of which the object is to convey meaning.

(4) Reception by contemporaries of the genius of his message, and resentment at his challenge to their modes of thought and conduct. How society moves forward in due course to the level of development which the genius was the first to indicate.

(5) Application of theory of didactic function of literature to poetry.

PART II. LIFE AND THE WORLD OF VALUE

Chapter VI. Interpretation of our awareness of beauty in aesthetic experience as revealing the existence of a world of value.

(1) Consideration and criticism of various subjectivist theories of the significance of aesthetic experience.

(2) Conclusion that beauty has an objective status and is independent of human appreciation for its existence. Cf. Plato's account of the Form of beauty.

(3) This position illustrated by Music as the reproduction in a material medium of the patterns or arrangements of the world of value.

(4) Extension of this conception to art as a whole, especially pictorial art.

(5) Resulting conception of the artist as an evolutionary 'sport' in whom life has emerged at a level capable of apprehending significant form, i.e. those combinations of line, colour, and sound in material world, which reproduce the patterns and arrangements of the world of value.

Chapter VII. Interpretation of the experience of goodness as revealing the existence of a world of value.

(1) Affirmation of uniqueness of ethical experience.

(2) Argument to prove that Utilitarian theories, regarding ethical experience as a means, fail to make provision for this uniqueness.

(3) Similar argument in respect of naturalistic theories of Ethics.

(4) Conclusion that to interpret goodness either in terms of its causes or its effects is to destroy its unique character.

It follows that our apprehension of goodness is intuitive and irrational, revealing to us, as does aesthetic experience, the existence of a principle of value, which derives neither its rationale nor its compelling power from the world of becoming.

Chapter VIII. Relation of the world of life and matter, which is the world of becoming, to the world of value, which is the world of being.

(1) Most philosophers assert that the universe as a whole is either changeless or perpetually changing.

(2) Neither of these conceptions either necessary or true of universe *as a whole.*

Certain factors in the universe, namely life and the material world, change; others, namely subsistent objects and objects of value, do not. These factors separated by gap of real discontinuity. The world of being does not ingress into or bestow qualities upon the world of events; the latter merely imitates or reproduces in a physical form an arbitrary selection from the former. Criticism in this connexion of Plato's theory of Forms.

(3) Fixed and static element in universe necessitated by notion of progress in evolution.

Criticism of philosophies which, while affirming mind or life to be developing and progressive, locate goal of evolution, and standard by which evolutionary progress is measured, within the process of development itself. Sense in which most philosophies since the Renaissance conform to this type.

(4) Conclusion, that there must be something external to and independent of the evolutionary process and in some sense the goal of the process. Life's relation to this goal will not differ from its relation to matter; it will be, that is to say, a relation

of awareness or contemplation, the duality of subject and object never being transcended.

Chapter IX. (1) Position taken up in preceding chapters distinguished from Buddhism, also from Professor Whitehead's philosophy, both of which affirm the separate existence of the permanent and the perfect as well as of world of becoming.

(2) Final sketch of position. Life as a force or principle which, appearing initially in world of matter, advances by means of emergence from awareness of matter to awareness of subsistent objects in thinking, and thence to awareness of objects of value in aesthetic and ethical experience. Goal of the process may be conceived to be continuous and untrammelled apprehension of world of value. Disappearance of individuality when this is achieved. Hence life, which begins as awareness directed upon world of matter, ends in contemplation of value.

(3) Parts played by poet, artist, and mystic in this process. The mystic as a precocious emergent of life, who spends his energies in a direct apprehension of the real, for which life as a whole is not yet ready.

(4) Allegory illustrating foregoing conceptions.

PART I

LIFE AND THE MATERIAL WORLD

CHAPTER I

VITALISM AND MATERIALISM

INTRODUCTORY.

THE object of this book is to work out a philosophy of life on the basis of a pluralistic metaphysic. I believe that the universe contains a number of factors or entities separated by irreducible differences in kind. Of these three, may, I think, be clearly distinguished, namely, life, matter, and value which is neither vital nor material. My thesis will be that life is a dynamic principle or force whose chief expression consists in the activity of knowledge. Knowledge is to be interpreted as awareness by the knowing mind of something other than itself, and, as life evolves, this awareness comes to be directed upon different kinds of objects. Life initially is aware of matter, but it develops; broadly speaking this development may be described as a passing beyond the awareness of the material world and the achievement of an awareness of the world of value. In Part I I shall be concerned with life's evolution in the material world, and shall endeavour to give an account of the relationship between life and matter, both as it is exhibited in life's activity of knowing or being aware, and as it is revealed in the interaction between mind and body to which the facts of our daily life bear continuous witness. In Part II I shall proceed to a consideration of the world of value, describe the nature of the awareness of that world which life has achieved up to the present, and give reasons for supposing that the course of evolution will witness an increase in the scope and an extension in the duration of this awareness in the future.

A philosophy of this kind involves—indeed it is founded upon—the assumption that life exists; exists, that is to say, not as an offshoot or temporary emanation of something that is not life, but as an ultimate and irreducible factor or principle. That this is an assumption the most casual student of modern science would be the first to point out. Before, then, I can proceed to the development of my thesis proper, it is necessary to indicate some at least of the grounds upon which the assumption is based. And here I find myself in a difficulty. The issue primarily involved in an assumption of this kind is, in the first instance at least, one of fact. I do not mean of course that it is so in the last resort, that my interpretation of the universe as a whole, and my estimate of the status and significance of mind within the universe, turn upon an

issue of fact; questions of interpretation and significance belong to the domain of philosophy, and it is by the traditional methods of philosophy that they will be canvassed in this book. But the data which the philosopher seeks to interpret are, at least in part, those accumulated by science, and if we want to know whether these data are such as to include a principle of life which is distinct from the matter with which it interacts and which it in some degree controls, it is to the scientist, and in particular to the biologist and to the psychologist, that we must in the first instance turn.

The question of what exists is an empirical one, and as Locke, Berkeley, and Hume pointed out two hundred years ago, no amount of reasoning will help us to solve it. If you want to know how the universe appears, you must go and look; in other words, you must ask the scientist. The task of philosophy only begins with the interpretation of the appearances which the scientist has catalogued for inspection, with the attempt to discover their meaning and to assess their significance.

Now with regard to the particular question which concerns us at the moment, the question of the autonomy of life as a principle or force distinct from matter, science, as is well known, speaks with two voices. Evidence in plenty is not wanting on both sides of the question, and it ill becomes a layman to pronounce with authority upon matters in regard to which the scientists themselves are divided. I at least make no pretension to do so. That mind exists and is not material I am on philosophical grounds convinced. There are after all many kinds of evidence besides that afforded by science of which the philosopher must take account, the deliverances of the moral sense, the testimony of the religious and more especially of the mystical consciousness, the quality of the emotion we feel for beauty and the ordinary cognitive experience of the plain man, and any part of this evidence may in itself be sufficient to decide our issue. Even in the domain of science itself I feel that an impartial estimate of the data afforded by biology and psychology makes for a vitalist rather than a mechanist conclusion. But not being a scientist I cannot contribute to the data, nor is my estimate of the comparative merits of conflicting hypotheses entitled to the respect which is due to an expert opinion. This, then, is my difficulty, that I must begin my book with a discussion of matters upon which any competent scientist is entitled to speak with more authority than I.

Yet it is a difficulty that it would be cowardly to shirk. That the philosopher must accept and not cavil at the conclusions of scientists is no doubt true; but where, as in the case in question,

the conclusions are largely contradictory, he must to the best of his judgement choose between them. I propose, therefore, in this first chapter to indicate as briefly as possible the nature of the evidence collected by science which seems to me to point to a Vitalist interpretation of the facts of the sensible world. I shall refer to the various movements in contemporary scientific thought which are critical of materialism, summarize some of the facts which do not seem susceptible of a materialistic interpretation, and indicate the main criticisms to which materialism is exposed. Having thus marshalled the evidence in favour of the view that life is a unique factor or principle in the universe, distinct from matter and in some sense independent of it, I shall be in a position to sketch the outline of the metaphysic which the assumption of this view seems to involve.

I could no doubt dispense with this first chapter altogether; it will perhaps be urged that it would have been the part of wisdom to do so. But I do not wish, in matters which lie so closely upon the confines of science, to incur the charge of making no acknowledgement to contemporary scientific thought. A philosophy is none the better, even if it is the safer, for being constructed as it were *in vacuo*. Besides, I am convinced that there does exist a basis of fact upon which a Vitalist metaphysic may legitimately be constructed, and the fact that I am not a scientist does not seem to afford an adequate reason why I should not indicate what that basis is before proceeding to the philosophy proper. Since, however, the bulk of the material which composes this chapter will be taken at second hand from contemporary science, since I shall be engaged in summarizing the conclusions of others rather than in contributing original material of my own, the pages immediately following should be regarded rather in the light of an introduction to a Vitalistic philosophy than as constituting an integral part of it. The philosophy itself will be attempted in Chapter II.

I. THE MATERIALIST HYPOTHESIS.

It is not necessary to recount at any length the arguments in favour of the hypothesis I propose to combat. Nineteenth-century science has made them sufficiently familiar, and although recent years have witnessed a decided trend away from materialism in its nineteenth-century form, there has been no alteration, as I hope in a moment to show, in its essential basis. The world of all-embracing matter against which the Vitalist wages war to-day is a wider, an emptier, a more elastic, a more mysterious, world than it was in Huxley's and Tyndall's time, but it is still material.

I propose, therefore, to indicate the main features of the materialist view of the universe, in its classical, nineteenth-century form, in order to throw into clearer relief the contrary view which I wish to advocate.

The two sources from which materialism chiefly derives are biology and psychology. In biology the issue turns mainly upon the origin of variations. Here there are two classical theories in the field. Darwin's theory, and it is only by courtesy that we can call it a theory, is in effect a prudent agnosticism; he could not tell how or why variations arose; what he could do, and did, was to emphasize the factors, struggle for existence, survival of the fittest and so forth, whereby the gradual accumulation of minute variations led to the appearance of new species. But, even if the origin of variations remained undetected or must be attributed to chance, this at least was certain, that their appearance had no relation either to the life history of the parent or to their value to the offspring, since Weismann was believed to have shown that the germinal material in which they arise is virtually independent of the organism which acts as its host.

De Vries' substitution of sudden and abrupt mutations for the gradual accumulation of small variations as the primary factors in the formation of a new species, does not seriously affect the position. Where the origin of both is unknown, a marked variation is no more mysterious than a minute one; if a materialist explanation is adequate for the latter, an explanation of the same kind will no doubt be forthcoming sooner or later for the former. If, on the other hand, we do not know what the materialist explanation of a mutation may be, it will avail us little to find one for the minute variation. That Darwin's prudent agnosticism is still the attitude of leading biologists, so far at least as mutations are concerned, the following quotation from Professors Thomson and Geddes will show: 'With all recognition and appreciation of the work and thought above summarized, we cannot but think that the secret of variability lies yet deeper, in the very nature of the living organism itself. It has been a Proteus from the first; changefulness is its most abiding quality; in short, the essence of the creature is its innate creativeness.'[1] In other words, once the variation has appeared, its fate will no doubt be determined largely if not wholly by the classical factors of influence of environment, struggle for existence, and so forth; but these factors are incapable of explaining the fact of its appearance—an expression of opinion, which is already half way on the road to Vitalism! But I anticipate.

[1] Thomson and Geddes, *Evolution*, pp. 142, 143.

The other classical theory is that of Lamarck. Variations are said to be due to the action of the external environment. As the environment changes, owing to climatic or other causes, it produces an effect upon the organisms living within it. This effect is to be interpreted as the organism's response to a stimulus; if the response of the organism is such as to adapt it to the circumstances of the changed environment, it survives and prospers; if not, it dies out. In the former event the variation in respect of which it survives is perpetuated.[1]

Both theses have one important feature in common; in accounting for the formation of new species they both reject the intervention of mind and disclaim the notion of purpose. The appearance of life upon the earth, the evolution of life through an infinite variety of forms, the whole of the process which begins with the amoeba and ends with man is explained not in terms of the operation of some purposive force or spirit, but as the result of the action of purely haphazard external agencies; for Darwin the *deus ex machina* was chance, for Lamarck, the influence of a physical environment.

It follows that changes which occur in living organisms never spring from within, but are always imposed from without. In order to account for them we need postulate no spiritual force or purposive will, whether operating within the organism or directing it from outside; it is necessary simply to specify the factors in the material situation to which the organism was exposed, and which cause it to react in the way it did.

The work which biology had begun psychology completed. What was true of the organism treated as a whole was true also of that aspect of the organism known as mind or spirit; its activity, like that of the creature in which it appeared, was the result of predisposing causes of a material character; and to give a complete account of its nature and content at any moment, it was sufficient to state what those causes were. This result was achieved by a simple extension of the psycho-physical parallelism which biology had inherited from Descartes. To explain the synchronization of mental and bodily events without introducing causal connexions, Descartes postulated a continuous series of divine miracles

[1] I am summarizing the general Lamarckian view and omitting any reference to the effects of use and disuse which Lamarck slipped somewhat inconsistently into the main theory, and which his followers have persistently ignored, as tending in the dangerous direction of the inheritance of acquired characteristics. I have omitted also Lamarck's hint of the possibility of *conscious* purposive adaptation on the part of organisms, which is of course inconceivable in a materialist universe.

indefinitely repeated. But as psychology grew more scientific, the resort to divine assistance to put together the pieces of the organism which Descartes had sundered fell out of favour. Yet interaction between substances separated by as wide a gulf as that which Descartes had driven between mind and body was no more conceivable than before. A paving-stone could crush a butterfly, but how could it affect a wish? An emotion could change the current of our thoughts, but how could it alter the temperature of a room? If mind and matter were really different, if they possessed no single attribute in common, how were they to 'come at each other' at all? It seemed a simple solution of the difficulty to deny the difference. Mind was an epiphenomenon upon the body; it was matter become conscious of itself, a film of highly attenuated matter surrounding the brain like the halo round the head of a saint, the function of which was to mirror or register the events that occurred in the brain. Between body and mind so conceived the fact of interaction offered no difficulty; there was between them a continuous causal relationship and it operated from the body to the mind. If the function of mind was confined to registering bodily events, it could not, it was clear, register what was not there; it followed that there could be no mental event without a preceding cerebral event. Mind then was part of the body, it was subject to the same causal laws as those which govered the body, and its activities were determined and conditioned by the activities of the body.

Putting together the conclusions of nineteenth-century biology and nineteenth-century psychology, we find that the chain of physical causation is complete. Every event in the body of the organism, including presumably the occurrence of a variation, is the result of some prior event in the environment that surrounds the body; every event in the mind (a courtesy title only) is the result of some prior event in the body that surrounds the mind. Thus the laws that govern the world of physics are everywhere paramount, just because there is nothing in the world other than the matter with which physics deals, and we find Tyndall in his Presidential Address to the British Association in 1874 predicting that the future of science will enable us to survey the 'ultimately purely natural and inevitable march of evolution from the atoms of the primaeval nebula to the proceedings of the British Association for the Advancement of Science'.

In a universe so conceived, life was of profound unimportance. Among the infinite permutations and combinations through which matter had passed, one had supervened in which matter had

achieved consciousness. This consciousness by matter of itself was life. Life then was a chance product of material forces and substances, evolved under certain conditions, and doomed to disappear when those conditions no longer obtained. As the sterner materialists were fond of saying, life was an eddy in the primeval slime.

This general conception was reinforced by contemporary geology and astronomy. Geology had enormously increased the age of the world, astronomy the size and spread of space. For countless ages it was known that the earth had been lifeless; through the limitless tracts of space ours was the only planet upon which life was known to exist, and in the vast immensities of geological time and astronomical space life seemed like a tiny glow, flickering uncertainly for a brief period before its ultimate and certain extinction. Once the earth had been too hot and too moist to maintain life; in course of time it would become too cold and too dry, and then life would finish its pointless journey with as little noise and significance as, in the person of the amoeba, it began it. The existence of spirit was not therefore a fact of cosmic significance, a signpost pointing in the fundamental character of the universe to something friendly and vital which underlay its apparent chaos and deadness and with which spirit was continuous; spirit was a chance passenger across a fundamentally hostile environment, in which the alien and the brutal conditioned and determined at every point the mental and the vital.

As for the universe, it was like the works of a gigantic clock. Some one or something unspecified at some time unknown (the materialists were inclined to pride themselves upon their candid admission of inability to account for the first cause) had wound the clock up; thenceforward it proceeded to function automatically through the interaction of the parts. One day, we may suppose, if the phenomenon of radio-activity may be accepted at its face value, the world process will come to an end. All the uranium in the world is breaking down, and we know of no source from which new uranium can come; what is true of uranium is true also of all the more complex atoms. The material universe is, therefore, visibly degenerating; the clock, to revert to our metaphor, is running down. Since the method of winding up new universes is not known, we must suppose that in course of time the material universe will dissolve its self into a cool glow of radiation uniformly diffused through space, unless some force of a kind unknown to science intervenes to infuse it with new energy. This last reflection is, however, strictly speaking out of order, since the principle

of entropy was not known to nineteenth-century physics; moreover it introduces speculations about the first cause, which, as we have seen, good materialists desire to avoid. And wisely, since, as there is no known process for the manufacture of radium, since, so far as our observation goes, radium is in process of diffusion only, the necessity on the materialist view for somebody or something to have concentrated in the sun and the stars the radio-energy which is subsequently diffused becomes disconcertingly apparent.

Now I maintain that the nineteenth-century picture of the universe whose outlines I have briefly sketched, though it differs in important particulars, does not differ in essential features from the materialism with which Vitalists are confronted to-day.

The modifications in the theory which the last twenty-five years have introduced have been chiefly in the direction of decreasing the materiality of matter. Matter is no longer something lying out there in space, a hard, tangible solid, upon which horse-sense can base its irrefragable convictions. It is conceived as an arrangement of point-events in a spatio-temporal continuum, or as a hump in space-time, a hump which, though rising to a peak of maximum intensity, is indistinguishable from the influence which it exerts, an influence which extends over the whole spatio-temporal field. Where space-time is not accurately Euclidean in a certain region, but has non-Euclidean characteristics which grow more marked as we approach a centre, then we say there is matter at the centre; but we do not know anything about the centre, the place where the matter is; we only know its influence on the field surrounding the centre where it is not. Matter is in fact the point at which Clerk Maxwell's equations break down.

From another point of view matter is a collection of charges of positive and negative electricity behaving in various ways, of which some can be formulated and predicted, while others, as for example the jump of the electron from one orbit to another, cannot. Here again physics, though it tells us that certain changes will follow one another periodically, does not tell us what it is that changes or what are its various states. Modern matter is no less tenuous than it is mysterious; even when we have located it, it tends to dissolve under our touch. The atom, for example, has no substance, and is not a thing. For the notion of thing we have to substitute that of emanations from a locality; but there is nothing at the locality to act as the source of the emanations. Again there is Mr. Bertrand Russell's universe of neutral particulars, events which in themselves are neither material nor mental, becoming

sense data or sensations, physical occurrences or percepts according to the context in which they are taken.

Finally we are asked to consider the part which the mind plays in the formation of the material universe. The world of relativity theory consists of evanescent point-events which exhibit certain more or less permanent characteristics of arrangement. The mind selects certain of these characteristics as being of special interest, and as a result of this selection there arise the world of space-time and matter and the laws of nature. Minds differently constituted, the minds of Martians for example, would select other features from the flux of point events, resulting in the construction of an entirely different kind of universe. Thus the world of matter that we study is the outcome of a mental principle of selection; it bears the hall-mark of mind upon it from the outset, and without mind it could not have come into being. The world of point-events as it is in independence of mind, if indeed there be such a world, we never know. Thus is Kant justified of modern science, and representationalism obtains a new lease of life.

In the same vein is the emphasis which Professor Eddington has repeatedly laid upon the fact that physical science studies not the actual qualities of the material world, but only certain pointer readings that we can observe. The pointer readings reflect the fluctuations of the qualities of the external world, but the qualities themselves remain unknown. Even the definitions of physics reduce themselves to a description of one set of entities in terms of another, which is itself only explicable in terms of the first set. In a famous article[1] Professor Eddington has taken as an example the expressions chiefly used in the theory of relativity, and shows how the ten potentials are derived from intervals, intervals are the pointer readings of scales and clocks, scales and clocks are compounded of matter, matter is definable in terms of mass, momentum and stress, and mass, momentum, and stress are analytical expressions containing combinations of potentials. Thus the world of physics reveals itself as a circle which is none the less charmed for being vicious. The only escape from an eternal perambulation of its circumference is to break the circle at matter, by defining clocks and scales as the entities which are known by mind. The mind in fact receives an impression which causes it to create the image of a clock or a scale in the external world. Whether there is such a clock or scale, or indeed anything which corresponds to them, we cannot tell; all that we know for certain are

[1] A. S. Eddington, in *Science, Religion, and Reality*, Paper v, 'The Domain of Physical Science.'

the impressions in our mind which the alleged material objects produce.

This discovery of the uses of Idealism by the scientists is particularly gratifying to philosophers, enabling them to retort upon the materialists by pointing out that it is precisely this that the philosophers have been saying all the time. As, however, we are not Idealists, we cannot avail ourselves of the assistance of these new allies who have enlisted themselves under the Idealist banner within the gates of science itself. As I hope to show later on, while the argument from the inability of the reasoning process to give a correct account of life or mind is valid enough, in so far as it claims that the mechanizing and isolating tendencies of reason preclude it from giving a correct account of anything, in so far as it asserts that we only know the external world as reflected in the ideas or impressions which it creates in our minds, it embodies a line of thought which, for reasons derived from theory of knowledge (see Chapter III) must be rejected. For the rest, in spite of the phantasmagoria of changing forms through which in recent years the matter of physics has passed, it is difficult to avoid the reflection that 'Plus ça change, plus c'est la même chose'. In spite of the growing tenuousness of matter it is still there, even if it is only 'there' in a Pickwickian sense, a sense which must somehow embrace the fact that it is also '*then*', it is still material, and it still entirely and completely determines what courtesy alone entitles us to call mind. Even neutral monism, which might have seemed to put mind and matter on an equality by regarding both as derivative from neutral events, still refuses to proclaim any bounds to the empire of physical law. Thus in *An Outline of Philosophy* we find Mr. Bertrand Russell summing up a discussion upon the relation between physics and psychology as follows:

> A sensation is merely one link in a chain of physical causation; when we regard the sensation as the end of such a chain, we have what would be regarded as an effect of matter upon mind; when as the beginning, an effect of mind upon matter. But mind is merely a cross-section of a stream of physical causation, and there is nothing odd about its being both an effect and a cause in the physical world. *Thus physical causal laws are those that are fundamental.*[1] [My italics.]

To say that life ultimately obeys the same laws as those which hold good in the material world is to deny what Vitalism claims; and the effectiveness of this denial is not impaired because matter has become attenuated to a ghostly presence, more mysterious because less familiar than mind, the laws of whose working are

[1] Bertrand Russell, *An Outline of Philosophy*, p. 156.

shown to have the validity only of statistical averages. Life is still an emanation, an offshoot from the material world; it is still determined by material events; it is still deprived of initiative, of spontaneity and of creativeness, and it can never act upon matter except in so far as matter first acts upon it.

This is the view which I propose to combat, and although the scientific issues involved lie outside the scope of philosophy proper, a brief summary of the main heads of the evidence against it will not be out of place as a prologomenon to my vitalist thesis.

II. THE EVIDENCE AGAINST MATERIALISM.

The evidence in question belongs chiefly to the two departments of science from which materialism derived its main strength, namely, biology and psychology. On no one of the points at issue is it conclusive, but its cumulative force is very strong.

(1) *The behaviour of living organisms.*

There are, first, arguments based upon the alleged difference of behaviour between the living organism and the machine. These differences may be summed up under the heads of purposive action, adaptability to changing environment in the endeavour to maintain constant environment, and maintenance of appropriate form and structure, each of these expressions being used to indicate a characteristic of a living organism which is not also a characteristic of a machine. The presence of each characteristic implies the operation of the general sequence of perception of situation, conative or hormic impulse, and action upon which psychologists lay stress.

Let us take as an example of purposive action the salmon ascending a stream to deposit spawn. All its activities are co-ordinated in such a way as to imply first the perception, whether conscious or unconscious, of some end related to its own persistence, development, or reproduction, and, secondly, conative impulses issuing in actions designed to achieve the end. In pursuit of the end the salmon surmounts every kind of obstacle in her passage to the upper reaches, and adapts herself, e.g. by jumping or diving, to the changing circumstances which she has to meet in a way which has no parallel in the behaviour of machines. Granted that the necessary co-ordination of activities at any one moment might be explained on a mechanistic hypothesis, it is yet impossible to conceive of a mechanism which would be self-adjustable to a wide range of varying conditions. This purposive adaptation to a changing environment in apparent pursuance of an end, takes in

some organisms the form of a definite change of structure. One of the most universal tendencies of living creatures is their attempt to reach a solid substratum from which they have been reft; to find in fact a support. For example, if a piece is cut from the stem of the hydroid *Antennularia* and suspended freely in the water, roots will grow out from its basal end and reach down until they meet the bottom and anchor the hydroid to it. The Amoeba again, if suspended in water, sends out long pseudo-podia in all directions until it touches something solid upon which it can glide.

These are examples of purposeful and co-ordinated activity in the sense that they imply perception of absence of support and efforts directed towards remedying the lack. They are, that is to say, designed to adapt the creature to a changed environment. From another point of view they may be regarded, with equal justice, as an attempt on the part of the creature to restore and maintain the environment to which it is accustomed, or, more accurately, to restore equilibrium between itself and a changed environment by effecting a corresponding change in itself.

Certain experiments carried out by Professor J. S. Haldane suggest the same mode of interpretation.[1] Dealing with the delicately adjusted response which the organism makes to increased oxygen want he concluded as the result of direct measurement that the lung epithelium must actively secrete oxygen in the blood. Here again the organism seems to adapt itself to a change in the environment by endeavouring to make good from its own resources and, within limits, succeeding that which was formerly present but is now lacking in its environment. The animal body, to put the point in the most general way, continually tends to maintain the conditions which are the most favourable for its own existence. It is not contended that it is only upon a Vitalist hypothesis that such activity can be explained; but it is nevertheless a fact that the behaviour in question, whether exhibited in movement or more radically in alteration of form and structure is exceedingly difficult to interpret without introducing the notions of desire and purpose. It is, that is to say, difficult, if not impossible, successfully to account for such activity on the assumption that the organism is just a machine. When the conditions necessary to the smooth working of a machine lapse it does not try to reproduce them, nor does it alter its form in order to adapt itself to the change; it just ceases to work.

Parallel with the efforts of the organism to maintain the most

[1] Referred to by Joseph Needham, in *Science, Religion, and Reality*, Paper vi, 'Mechanistic Biology,' p. 235.

favourable conditions for its development is its persistent endeavour to attain and preserve its own appropriate form and structure. There seems to be a kind of autonomy in all organisms in virtue of which the normal and typical form and structure are achieved. Once again it is exceedingly difficult to explain the various organic changes through which the creature passes in the course of achieving its proper form on the basis of any of the classical mechanist factors. For example, the radical and apparently spontaneous transformation in a closed chrysalis, which is almost isolated from the action of external agencies, is opposed to the concept of evolution by such agencies. The transformations and metamorphoses and the progressive or regressive changes of the insect's larval existence are equally opposed to the concept of a continuous and uninterrupted evolution by functional assimilation. Even more remarkable from this point of view is the phenomenon of histolysis in the course of which most of its organs are reduced to an amorphous emulsion preparatory to the coming transformation. Facts of this kind seem to postulate a conception of evolution as the drive of an internal impulse entirely distinct from surrounding influences; such an impulse is, of course, incompatible with the assumptions of the classical theories of mechanism.

Once the proper form structure of the organism is achieved, it persists in spite of interference, provided that the interference is not too great. The creature, in fact, makes apparently spontaneous efforts to preserve its structure intact; if it is damaged or altered in any way it does its best to repair the omission. To knock a leg off a crab is to prompt it to grow a new one; it is not so with the lever of a machine.

The facts connected with the achievement of normal form structure, and its preservation when achieved, seem then to point to the existence of a general trend or drive in the organism to develop in a certain direction; if an obstacle is placed in the way of this development, the organism seeks first one way and then another of overcoming it. This is brought out very clearly by Driesch's experiments on embryos. Driesch found that if an embryo which has developed as far as the blastula stage, in which it is a hollow and perfectly symmetrical sphere of cells, is divided into two or more parts by a sharp cut, each segment develops in due course into a complete embryo. Thus, since the number of planes along which the cut might have been made are infinite, each part of the embryo must be prepared to develop in any way required; what is more, it must know how the other parts are developing in order that it may determine for itself what form of

development is required. In other words, up to a late stage of development every cell must possess the potentiality of turning into any other, whether liver cell, blood corpuscle, or brain tissue according to the demands made upon it, and the requirements of the rest of the body. These demands, moreover, cannot be foreseen, since the plane along which the cut is made is a matter of chance. 'A very strange sort of a machine indeed', says Driesch, 'which is the same in all its parts.' 'It is not possible', he continues, 'to conceive of a machine being divided in any direction and still remaining a machine.' [1]

Thus the evidence seems to suggest that the behaviour of the salmon going up stream, a behaviour which, I have suggested, is purposive, is experimental and involves adaptation of movement to environment, is only a special case of the phenomena exhibited by all developing organisms. The development of the embryo, no less than the behaviour of the adult creature, compels us to regard the organism as the expression of a drive or force which up to a certain point has limitless experimental resources at its disposal; of these resources it employs first one and then another in order to ensure that the organism may achieve and maintain its appointed form and structure, and this structure once achieved, may proceed to act in a manner appropriate to its nature. The organism, in other words, seems at all stages of development to act in fulfilment of a pre-existing purpose.

Can behaviour so conceived be explained on a materialist basis? Is it compatible, for example, with the materialist theory of heredity, according to which the raw material of the evolution is the immutable germ-cell, which throws up, without rhyme or reason, useful, useless, or positively harmful new characters which the forces of natural selection then proceed to weed out? On this question I cannot do better than again quote Professor Haldane. The acceptance of the mechanistic theory involves in his view the supposition that 'the cell nucleus must carry within its substance a mechanism which by reaction with the environment not only produces the millions of complex and delicately balanced mechanisms which constitute the adult organism, but provides for their orderly arrangement into tissues and organs, and for their orderly development in a certain perfectly specific manner. The mind', he comments, 'recoils from such a stupendous conception.' [2]

That such a conception should ever have been entertained is due, in Professor Haldane's view, to the vicious abstractions and

[1] Quoted by Joseph Needham, in *Science, Religion, and Reality*, Paper vi, 'Mechanistic Biology', p. 236.

[2] Ibid., pp. 237, 238.

schematization of the scientific method. The point is important not only in itself but in its bearing upon our general thesis, and it is worth while devoting some little space to its examination.

(2) *The Abstractions of scientific method.*

The view that science necessarily falsifies the material which it studies, a view with which Bergson's writings have long made philosophers familiar, is now beginning to affect the thought of scientists themselves. The general acceptance of the evolutionary theory has had results far different from those which Huxley and Spencer could have foreseen. On the one hand there has arisen a series of difficulties with regard to particular points, which Vitalists have not been slow to emphasize. These difficulties do not become easier of solution as research proceeds. For example, it is asked how mutations and the production of new species could arise from the mechanical rearrangement of existing material, or qualitative transformation result from quantitative permanence and determinism of material. Difficulties of this kind will be found in the works of writers such as Driesch and M. Geley, and I have ventured to refer to a few of them in this chapter.

Apart from these specific difficulties, however, the theory of evolution has led to a relativist view of mind. If mind itself has been evolved in the struggle for existence, if it is a provisional and practical faculty which develops and changes even in the lifetime of a single individual, why should it be credited with the capacity for grasping absolute truth or for giving us correct information about the nature of reality. 'The forceps of our mind are crude', said Bergson, 'and they crush the delicacy of reality when we attempt to hold it.'[1]

The implications of this 'scepticism of the instrument' have been applied by Dr. Broad to the conclusions of mechanistic biology. If scientific method does not present us with a true picture of the real, if the conclusions of physics and chemistry unmistakably bear the imprint of the mind which formed them, then it is clear that they cannot be extended to embrace the workings of mind itself. If it is of the essence of a scientific theory to analyse and disintegrate, and, in so doing, to falsify, then, Dr. Broad argues, to apply the conclusions of mechanistic science to the study of the mind from which they emanate, will be to describe mind in terms of its own projections and to describe it falsely;[2] it will be to permit the

[1] Quoted by Joseph Needham, in *Science, Religion, and Reality*, Paper vi, 'Mechanistic Biology,' p. 247.
[2] Broad, *The Mind and its Place in Nature.*

creature to sit in judgement upon its creator, the instrument to turn against the hand that wields it.

The questions here raised properly belong to Theory of Knowledge, and will accordingly be dealt with in Chapter III, where I shall venture to suggest that, in so far as its *general implications* are concerned, in so far, that is to say, as it requires us to deny that the mind can give us a direct, undistorted, and unbiassed view of the external world, the relativist view of mind ought to be rejected. So much at least I shall try to show in later pages. Inadmissible, however, in so far as it impugns the validity of mind's general apprehension of the objects presented to it, the Bergsonian criticism of the scientific intellect rightly convicts it, in my view, of inability to grasp the peculiar character of life.[1]

It is the nature of the mind to apprehend an isolated fact and to proceed to deal with it as a static distinct entity, which can be understood independently of its relations to other facts. Without wishing to anticipate here the discussion of Chapter III I may point out that in so far as the universe consists of isolated facts—and I think that the external world of matter is in fact composed of them[2]—this procedure is perfectly legitimate. In so far, however, as the object studied is a continuous and continuously changing entity, in so far as it is not a fact but a flow, the isolating method cannot but be inappropriate. Hence, as Le Roy points out, if there be in the universe a stream or principle of life whose essence is continuity, it follows that schematization, disintegration and analysis, which are the watchwords of the scientific method, must of necessity give a false account of its nature. There is no such thing as an isolated fact of life; everything living flows into everything else, and to dissect the living organism, to treat it as a collection of parts which can be studied in isolation as parts, is to fall into error.

Writers on Vitalism have developed this criticism, pointing out that it is in the nature of scientific thought to analyse and take to pieces. When we think scientifically we do not regard the object as a whole but only in bits, and we focus our attention upon the bits so abstracted. Thus, when the scientist comes to deal with the living organism, he makes an artificial abstraction from its concrete reality by omitting its psychological and biological aspects, and proceeding to treat it as a physico-chemical mechanism. The being that results is only a framework of the living individual, a figment which is as false as the famous 'economic man', and false

[1] See Chap. III, p. 118, and Chap. iv, pp. 182–5, for the impracticability of mind's attempt to know and describe the nature of its own experience.
[2] See Chap. II, pp. 51, 52.

for the same reason. Man is no doubt a physico-chemical construction, as he is also a battlefield of economic motives; but he is much more than this; he is a concrete individual, and to generalize about one particular aspect of him is to let the individual escape. Two separate fallacies are here involved.

(*a*) In the first place we neglect the organism as a co-ordinated whole. The essence of the individual is that he is a co-ordination of different functions; hence to study separate functions by biochemical methods is inadmissible. You cannot understand a living organism as you can a motor-car by studying one part, for example the carburettor, and then proceeding to the pistons and examining them. The organism, in short, is a unity, and, even if physico-chemical methods afforded an adequate explanation of the workings of any one organ, they must fail to explain that which unifies the organs into a whole. The method of science is thus essentially inadequate to the treatment of the living organism. Science is analytic; it takes the complex and breaks it up into a number of simples; it takes the new and seeks to describe it as a re-arrangement of the old. This mode of treatment, having proved its value in physics and chemistry, was naturally but erroneously applied to biology. Erroneously, since the initial assumption is involved that the organism is adequately described as a number of parts. If this assumption can be made, a treatment which consists in breaking the organism into its parts, examining the parts separately and exhibiting them mechanistically, will render a complete account of the organism. But this conception begs the question at issue; it may be that in the disintegrating process something has been lost, something let slip, and this something may be precisely that which differentiates the organism from a mechanism and constitutes it a unified whole. This something is life itself.

The conclusion is, then, that the organism as a whole is the only possible biological unit. 'The ground hypothesis or conception is', says Professor Haldane, 'that each detail of organic structure, composition and activity, is a manifestation or expression of the life of the organism regarded as a separate and persistent whole.'[1] Thus mechanistic biology, in regarding it as a collection of parts and then describing the relations of parts one to another, must of necessity fail to give a complete account of the living individual. This conclusion was endorsed by Sir Charles Sherrington in his Presidential Address to the British Association, 1922.

> The living creature [he said] is fundamentally a unity. In trying to make the 'how' of animal existence intelligible to our imperfect know-

[1] J. S. Haldane, *Mechanism, Life, and Personality*, p. 100.

ledge, we have, for purposes of study, to separate its whole into part aspects and part mechanisms; but that separation is artificial. It is as a whole a single entity that the animal, as for that matter the plant, has finally and essentially to be envisaged. We cannot really understand one part without the other.

(*b*) Not only does the scientific treatment of the organism wrongly split it into a number of separate spatial parts, it also tends to regard it as a series of discrete temporal units; it overlooks, that is to say, its persistence in time. At any moment of its existence the organism may indeed present the characteristics of a mechanism, but, as Bergson has shown to take the organism as it is at any moment is to falsify it, for the reason that the organism at any moment is an abstraction. Life is a continuous becoming, and for this reason it exhibits the qualities of a continuous process. The mechanistic point of view is no doubt for many purposes extraordinarily valuable, but it deals and can only deal with an abstraction from the living reality, with the living organism regarded as a momentary mechanism. It can take no account of the continuity of life, of its development, of the persistence of past experience into the present, and of the carrying over of the present into the future.

Summing up these lines of criticism we may say that life is a unity which is more than the sum of its parts; it is also an enduring entity which is more than the sum total of its manifestations at any given moment. Both aspects are ignored by the mechanistic treatment of the organism. Life regarded as a continuing process manifested by individuals, which endeavour first by one method and then by another to achieve and maintain the appointed end of their development, can be interpreted only in psychical terms, which ultimately derive their meaning from our own experience of living.

The conclusion is that the organism is a unity persisting in time, expressing the laws of its being in opposition to the environing forces which surround it, and responding by movement or alteration of structure to the exigencies of the situation in which it finds itself. It is only when the unity of the individual is destroyed by mechanistic analysis that its actions and form changes can be regarded merely as reactions or responses to the stimulus of the environment.

When the behaviour of the organism is looked at as a whole, when moreover the persistence of the organism through time is taken into account, its activities are seen to be the expression of a drive from within impelling the individual to realize certain ends appropriate to its nature, and within limits to mould its environment conformably with those ends. It is as the embodiment of

a push from behind seeking to realize an end which lies, as it were, in front, rather than as the response to an external stimulus, that individual behaviour is to be interpreted.

(3) *The relation between animate and inanimate matter.*

It is customary to object to the view here advanced that it assumes a distinction between the living organism and inanimate matter for which no warrant can be found in modern science. The further the bio-chemist pushes his researches the more difficult does he find it to determine where the animate begins and the inanimate ends. If life exists and is non-material, its presence, it is clear, cannot be detected by direct inspection; it can only be inferred from behaviour, and evidence is forthcoming from an increasing number of sources to show that precisely those characteristics of adaptability, purposive behaviour, and maintenance of proper form which I have enumerated as peculiar to the living organism, are exhibited also by chemical substances.

Since the days of the primitive distinction between living things which moved and dead ones which did not many different criteria have been suggested to distinguish the specific characteristics of living organisms. One by one they have been abandoned, with the result that Vitalism tends to present the appearance of a losing cause which, after sustaining a series of continuous defeats at the hands of the advancing scientists, retires in disorder from one position after the other. For example, the tendency of organisms to keep their environment constant has been shown to be only a special case of the thermo-dynamic principle in chemistry, according to which, 'when a factor determining the equilibrium of a system is altered, the system tends to change so as to oppose and practically annul the operation of the factor.'[1] The facts of buffer action in acid-base systems and poising action in oxidation-reduction systems are quoted in illustration of this principle. The implication is obvious; as Bayliss says, 'The fact that an organism has developed means of returning to the condition to which it has been previously adjusted may be called "nostalgia", but I am unable to see that this makes it essentially different from a physico-chemical system.'[2] Again, the principle of alleged spontaneous adaptation to environment on the part of the living organism, a principle which Vitalists claim in support of the hypothesis of a common directive entity is, it is objected, double-edged. If we are going to postulate a vital force or entelechy at all, we must, it is said, be prepared to introduce it

[1] Le Châtelier, quoted by Joseph Needham, in *Science, Religion, and Reality*, Paper vi, 'Mechanistic Biology,' p. 244.

[2] Ibid., p. 244.

into the inorganic world in order to account for the fact that it is as closely adapted to the living organism as the living organism is to it.

Take again the persistence of the organism through time, the preservation of the past in the present, the real duration upon which Bergson lays stress. This characteristic too can be paralleled in the chemical world; it is a well-known feature of systems in a colloidal state. The behaviour of a silicic-acid gel, as Bayliss has pointed out, varies according to the degree of concentration of the water vapour to which it has previously been exposed; it is different after exposure to a high concentration from what it is after exposure to a low. For these and similar reasons it is contended that no certain means of differentiation has yet been established between the behaviour of living organisms and that of chemical systems. Moreover, it is reasonable to suppose in view of what has happened in the past that the plausibility of whatever mode of distinction may win acceptance at the moment is due to the insufficiency of our knowledge, and that, as science advances, it will be left behind.

Upon the question here at issue I am not competent to express an opinion; the matter is pre-eminently one for decision by the scientists, and the scientists are notoriously divided. I am, however, entitled to consider its bearing upon the particular controversy under discussion. And here I must confess that I fail to see its relevance. I am concerned with the extent to which the materialist or mechanist hypothesis adequately explains the behaviour of living organisms. How does it affect this issue to prove that all organisms are living? Let us assume that there is in fact no distinction between organic and inorganic matter. What will follow? Simply that whatever mode of interpretation we find it necessary to adopt for organic matter must be extended to apply to inorganic. Materialists, impressed by the argument from the growing approximation between the living and the dead, proceed to infer that the living must be interpreted in terms of the dead. But this inference begs the question; the argument may just as well be used to show that the dead must be interpreted in terms of the living. If, that is to say, the kind of explanation of the behaviour of the living creature given above is the only one which adequately fits the facts, then we must accept the logic of the position and apply the same kind of explanation to the behaviour of chemical systems.

In so doing we shall find that the argument from the inadequacy of our present scientific knowledge, an argument which is usually quoted in support of materialist conclusions, may be used with

equal force against materialism. Instead of saying that an increasing knowledge of living bodies will enable us to explain their behaviour on mechanist lines, I shall maintain that an increasing knowledge of the properties of matter will reveal with growing plainness the presence of life; all things, I shall say, are living, but our present knowledge is insufficient to detect the mode of their vital behaviour. We may hope, however, that the future advance of science will produce instruments of a sufficient delicacy and precision to record the living characteristics of chemical substances.

Nor is this suggestion entirely unsupported by evidence. Among the essential features of vital behaviour I have noted spontaneity and freedom, the performance, that is to say, of actions which are unpredictable in the sense that they seem to be outside the cause-and-effect sequence; it is precisely with this characteristic that the most recent conclusions of physicists appear to endow the ultimate constituents of matter. That physical science gives us no knowledge of these ultimate constituents is a commonplace; it only informs us of the way in which under certain conditions they will behave. And when we ask for the characteristics of the behaviour of the basic constituents of matter we find that they include just the factors of spontaneity and unpredictability of which I have been speaking. The path of the orbit of the electron as it rotates around the proton is known, but nobody knows what causes an electron to jump from one orbit to another. The most that physics can do is to determine a statistical average of the occurrences in question. So far as our knowledge goes at the moment we can only suppose that the electron behaves like this because it wants to; its movement, that is to say, is not adequately interpreted as the result of antecedent causes; it does not merely react to the environment in which it finds itself, but, like the living organism, it seems to possess an innate creativeness and spontaneity in virtue of which it can itself affect and alter its environment.

Vitalism has thus nothing to fear from a scientific demonstration of the essential similarity between animate and inanimate matter; to show that the human body is in all respects amenable to the laws of chemistry and physics would be of little avail if these laws are unable to give a completely adequate account of the behaviour of matter itself.

(4) *The evidence from biology.*

We arrive at a similar conclusion if we consider the nature of the ultimate constituents of *living* matter. These ultimate constituents are, the biologists tell us, packets of chemicals. In the

germ cell the chromosomes are the bearers of the hereditary factors; these hereditary factors are represented in the chromosomes in a definite and constant order, being ranged along its length like beads along a string. These beads are the genes which are further described as complex chemical substances, which it is conceivable that the advance of science *may* enable us to describe adequately in chemical terms. Now it has been established that some at least of the changes which lead to the appearance of a new character, or to the alteration in an existing one, can be referred back to changes in the genes. Hence arises the possibility that we may ultimately be able to locate the origin of *all* new characters in the same quarter, and we arrive at the orthodox scientific view which ascribes all the subsequent events in the history of the organism to gene changes in the germ cell interacting with the environment in which the organism is placed. 'Life', as a recent writer has put it, 'is like molten metal, capable, if unrestrained, of spreading itself in all directions. Environment, like the mould into which the metal is poured, checks its advance here and permits it there, and so determines the form of the final product.'[1] Such, at least, is the orthodox materialist view.

Now apart altogether from the fact that the origin of these changes in the genes, changes which we must envisage as alterations in molecular composition, is entirely unknown, and is at present, for want of a better explanation, ascribed to pure accident, the assumption that the chemical material constitutes *the whole* of the inheritance of the individual remains entirely unproved. What is more it begs the very question at issue. Just as the electron's jump from orbit to orbit evades description in terms of physical laws, so do the gene changes in terms of which the appearance of new characters is explained evade description by biological law. In each there appears to be something that slips through the meshes of the materialist formula. That the genes in the germ cell of a great musician are different from those in the cell of his idiot brother is not denied; what remains to be proved is that this exhausts the difference between them. May it not be the fact that the difference of composition in the genes is the expression of some more ultimate difference, which can only be accounted for in psychical terms? No biologist has ever yet attempted to describe the nature of the chemical change in the germ cell which has given the world a new religion, a great symphony, or a moral advance, and there is absolutely no reason to suppose that the activity implied by such achievements can be accounted for

[1] W. Russell Brain, *Galatea or the Future of Darwinism*, p. 11.

exclusively in terms of an alteration in germinal material. That all gene changes mean changes in the individual is true; but that all changes in the individual can be adequately described in terms of gene changes, and consequent alterations in reaction to environment, remains to be proved.

It may be said that no materialist has ever maintained that differences of mental characteristics can be referred back to differences of germinal mutations; yet that this conclusion, whether it be realized or not, does in fact follow from the Neo-Darwinian position is, I think, undeniable. That nobody expects to be able to locate the origin of the theory of relativity in a chromosome is true; but the theory of relativity must, if the Neo-Darwinians are right, be for all that the result of interaction between inherited predisposition and environment, since, on the materialist view, there are no other factors which can be taken into account. Inherited predisposition is analysed in terms of the distribution and composition of packets of chemicals; it is therefore material: environment is also material; hence, unless we are to introduce some factor of a psychical order of which Neo-Darwinism refuses to take account, we are in fact constrained to explain religion and art, science and mathematics, in terms of the chemical composition of the germ cell. The task is a formidable one, and it may well be asked why it should be attempted? Why is it inconceivable that a true initiative should exist in nature, that changes should occur in living creatures which are not induced by but exploit the environment, and that these changes should be not only spontaneous but purposive? And by the use of the word 'purposive' I wish to imply that living organisms may be regarded as the embodiments of a psychical force that develops in and through them, using them as the means for its own self-expression. I suggest, in other words, that living creatures may be at once the instruments and the experiments of a vital activity which transcends while it informs them. In so far as they are experiments they will be born changed; in so far as they are instruments they will, by means of their own spontaneity, achieve changes; in so far as they are chemical structures compounded of matter in a world of matter, they will be changed automatically in response to changes in their environment; they will, that is to say, have changes thrust upon them.

To say that only changes of the third kind occur because they are the only changes that physical science can explain is to stretch the evidence to breaking point on the Procrustean bed of a preconceived theory. To say that there are changes of the first and second kinds (both of which, as I shall try later to show, can

ultimately be resolved into changes of the same type) is to postulate the existence in the universe of an agency or activity which, while using matter in pursuance of its purposes is itself non-material. It is to say that living bodies, although from one point of view they are chemical systems and, as such, are amenable to chemical laws, are, from another point of view, musical instruments whose keys are played by something other than themselves; it is to say that life is the phenomenal disturbance in a world of matter in which a non-material entity has appeared, and that living organisms are the visible signs of its appearance.

Before carrying the argument from the sphere of biology into that of philosophy I should like to conclude my brief survey by pointing out that it is only on some assumption of this kind that the persistence of the evolutionary process can be explained. Even if the classical factors of adaptation to environment and natural selection afforded an adequate explanation of how and why life evolved up to the point at which it became adapted (which in view of their failure to explain the origin as distinct from the subsequent history of variations they do not), they would still be quite unable to account for its continued evolution after that point had been reached. Adaptation to physical environment, or at least a greater measure of it than exists among men, was achieved long ago among beings whom we are accustomed to regard as our inferiors. The monkey, for example, suffers fewer diseases, the elephant is longer lived than man; the tiger has succeeded in evolving a covering which renders him immune from the vagaries of the climate, and kills only as many of his fellow-creatures as he requires for his sustenance. Man, on the contrary, is unable to exist unless he is protected from his environment by coverings taken from other animals, and, so far from having achieved equilibrium in his environment, preys upon it continuously in the attempt to alter it. Man, considered from the purely physical point of view, is thus ridiculously unfitted to his environment, besides being immeasurably the most destructive of all the creatures in that environment. Why, then, if the motive force and driving power behind evolution is the need to secure adaptation to environment did not evolution stop at the elephant and the monkey? Why did it go on to produce man? It seems difficult to resist the conclusion that evolution is the expression of some force or impulsion, which, not content with achieving relative safety for its creatures by means of adaptation to environment, proceeds to complicate itself ever more and more dangerously in the endeavour to evolve *higher* forms of life. It is on this assumption that this book is written.

(5) *The evidence from psychology.*

I pointed out earlier in the chapter that the evidence for materialism is derived chiefly from biology and from psychology. Having briefly indicated the difficulties to which its conclusions, in so far as they are based on the biological evidence, are exposed, I ought to proceed to a consideration of the psychological case against materialism, to show how the hypothesis of mind as a mere register of bodily events fails to account for such activities as memory, foresight, and expectation, and to convict it of a special incapacity when confronted with the phenomenon of the mind's grasp of meaning, a phenomenon which constitutes an integral part of the activity of thinking. How, I might ask, on the mechanistic theory does the reader's mind accept or reject the arguments I am now putting forward? That there are materialistic explanations of all these phenomena I am aware; but it is not difficult to show their inadequacy.

I refrain, however, from making the attempt in this chapter for two reasons. In the first place the ground to be covered is sufficiently familiar to the readers of modern text-books on psychology, and there is no need to traverse it here. I should only for the most part recapitulate the arguments of the opponents of Behaviourism, arguments with which in the main I agree but which I need not repeat. In the second place, what I have to say upon psychological problems, in so far as it has a special bearing upon the general thesis of this book, will fall into place naturally as the theme is elaborated. Chapters III and IV in particular contain a criticism of current psychological theories of memory and images, which inevitably arises in the course of a general discussion of the nature of vital activity.

Apart from this, however, there is a further reason why the discussion of psychological problems would be out of place in this chapter. That psychology is still in an experimental stage is generally admitted; there is controversy not only about the conclusions at which it arrives, but even about the methods which it adopts. No body of agreed knowledge stands to its credit, and it has still to emerge from a realm of conflicting theories, in which each school seeks to discredit the views of its rivals. Psychology, in a word, though it purports to be a science is not yet scientific.

For all that, some truths have been discovered, and some theories, as for example, the theory of the conditioned reflex, seem to be definitely established. But these truths, if truths they are, are truths not about the mind but about the body, and in so far as

psychology has reached conclusions which can be experimentally verified they will be found in every case to be conclusions about the body. Psychology, in a word, in so far as it has succeeded in establishing itself as a science reveals itself in the process as a branch of physiology; in so far as it purports to be a study of psychical as distinct from bodily activity it retains all the characteristics of vagueness and inconclusiveness which are traditionally associated with philosophy. And for this, I believe, there is a good reason.

Mind, as I shall try to show, is bare activity. This activity is that of awareness, and one mental act is only to be differentiated from another in terms of the objects upon which the awareness is directed. There are, in other words, no mental entities such as ideas, images, or thoughts, of the kind which are loosely described as states of mind; there is only mind, and the different objects of which mind is aware. Furthermore, the bare activity of awareness, an activity of which all our mental experience consists, cannot itself be known or described; it can only be lived through. The endeavour to treat the act of awareness as object for purposes of analysis and description, an endeavour which requires us to fix it momentarily and hold it fixed, inevitably falsifies the object described. Mind is always and necessarily the subject of experience; it cannot be treated as object without being altered in the process. Psychology, therefore, in so far as it seeks to give an account of mental activity, is dealing with what is essentially indescribable. The conclusion is that, although a study of mental processes undeniably reveals the existence of something other than body and brain, something which for want of a better term we call vital activity, its existence cannot be demonstrated by the methods followed in this chapter. The questions involved belong rather to the theory of knowledge and will be considered in Chapter III.

Conclusion.

The conclusion which I have sought to establish in this chapter is that the behaviour of living organisms cannot be adequately described in material terms, since the study of their behaviour reveals the presence of an entity or activity which evades material analysis. This entity or activity in its general description is what I have called life, of which mind is a particular mode of expression. Life, I have urged, is not material and cannot be explained on a materialist basis.

The announcement that life exists, that it is real and that it is something other than matter has usually been treated by

philosophers as a prelude to the further announcement that life alone exists. If the universe is not material through and through, then, they have held, it must be vital or spiritual through and through. This view has been advanced in one or other of two forms. Either the universe is composed of an infinite number of separate living units (spiritual monadism), or it is the expression of an all-embracing mental entity (spiritual monism). I believe that both these views are mistaken. Spiritual monadism, while making allowance for the fact of plurality, treats the plural units affirmed as purely spiritual entities. This hypothesis seems to me to be untenable for two reasons. Either the monads are self-contained worlds of experience, windowless, in fact, in which event there is no escape from Solipsism, or they are capable of knowing or being aware of something other than their own experience. In the latter event there is, I hold, no reason for supposing that the objects which are revealed to the monad's awareness are other than what they appear to be, from which it follows that some of them at least are material. The reasons for this view will be given in Chapter III.

Spiritual monism denies the reality of plurality, seeking the origin of apparent difference in a fundamental unity. This view is, I think, untenable both because it rests upon a false theory of knowledge, and also for certain metaphysical reasons which will be advanced in the next chapter.

If both spiritual monadism and spiritual monism prove inacceptable the grounds for regarding matter as non-existent or illusory disappear. Since I have already advanced reasons in favour of the view that life is a distinct and unique principle not to be analysed into material terms I am committed to a thoroughgoing dualism which accepts both life and matter as real and irreducible facts. The task of accommodating these two factors in the universe and of examining the relation between them will occupy me for the remainder of Part I.

CHAPTER II

THE CASE FOR PLURALISM

INTRODUCTORY.

VITALIST philosophies tend in general to be monistic in character. Having demonstrated the impossibility of explaining the behaviour of living organisms on a purely materialist basis, and emphasized in consequence the necessity for postulating the existence of a vital principle, whether mind, spirit, or unconscious Will, they usually proceed to identify this vital principle with reality. The next step is to derive all the variety of life and nature from this reality, exhibiting the static and inorganic as mere appearance and stigmatizing diversity and multiplicity as illusory. Matter and plurality, they assert, belong to the world as it presents itself to the unreflecting view of common sense; a deeper and more philosophic insight reveals a reality which is a unity underlying all the diverse manifestations of the world of appearance. Thus, for Bergson, the flux of the *élan vital* is the sole reality, and matter is an illusion born of that non-metaphysical faculty the intellect, while for Schopenhauer only the Will possesses a full title to be called real, the various grades and modes of its objectification enjoying a merely temporary existence before their re-absorption into the ever-changing surge of the reality from which they sprang.

Hence we are faced with a new form of the distinction between appearance and reality. Like the Idealist systems of the nineteenth century the Vitalist philosophies of the twentieth are essentially monistic, but, as compared with the world of Hegel and of Bradley, appearance and reality have changed places, or rather have exchanged attributes. Change and movement are now the characteristics of reality; it is permanence and stability which are relegated to the world of appearance. In this chapter I shall try to show not only that such a view is by no means necessitated by the assumption of the unique character of life as an immaterial activity, but that it is as totally unable to explain the diverse phenomena of the universe as the materialism which it seeks to replace; that Monism, in other words, whether it be the Monism which asserts an unchanging Absolute or an ever-changing flux as the basis of reality, fails to give a satisfactory account of the facts of life and nature. In this respect, therefore, philosophic Monism of whatever type must, if I am right, plead guilty to the same charge as that which

the Vitalists have themselves brought against the materialistic Monism of the scientists.

My thesis is, then, that the facts of experience cannot be explained on the assumption that everything that is is the manifestation of one fundamental unity whether that unity be mind, change, or matter.

If this position can be established, it will follow that we must postulate the existence of at least two different kinds of entities, of which our principle of life will be one, at the basis of reality. This with its corollory of dualism is the conclusion which in this chapter I shall seek to draw. I shall begin the discussion with a few preliminary remarks on the nature and genesis of that system of beliefs about the universe to which we give the name of monistic.

I. THE ATTRACTION OF MONISM.

That Monism has an attraction for many minds there can be no two opinions. And these minds tend, moreover, to conform to a certain type; it is one which is at least as high as any that Life has hitherto succeeded in evolving; a good case could, indeed, be made out for regarding it as from many points of view the highest. The most imposing systems of philosophy, the most impressive acts of piety and devotion, the noblest characters and the holiest lives have been inspired by a fundamentally monistic attitude to the universe, an attitude which expresses itself on the intellectual side in a conviction of the fundamental unity of life and reality, and on the spiritual in a passionate longing for the absorption of the individual soul in the unity so affirmed.

Whether this attitude is at bottom that of the mystic and the artist we shall in later pages see reason to doubt. For the present I am content to emphasize the attraction which the monistic conception of the universe undoubtedly exerts, and the nobility of the minds to which it has appealed. Those who embrace it are, however, faced from the outset with a problem of great difficulty. It is with the solution of this problem that the most important part of their thinking may be said to be concerned. The problem is that of the relationship between the fundamental reality which is one, and the appearances which are many. If we are to postulate a real unity, what account are we to give of the appearance of diversity?

Faced with the problem of reconciling the one with the many some thinkers have proposed a solution, which we may, I think, in so far at least as it purports to have a philosophic as distinct from a purely personal bearing, dismiss at once. The universe obviously presents the appearance of plurality, the evidence for unity being

on the surface sadly to seek. Since, then, there is little or nothing in the appearance of things to suggest a unity behind them, the conception of unity must, they have affirmed, spring from and reflect some fundamental need of the human spirit. The conception of unity has then, on this view, no necessary counterpart in reality, or, if it has such a counterpart, we cannot know that it has. What it reflects is a necessity of human thinking; what it expresses, a characteristic of human need.

That this belief, attractive and even necessary as it may be, is not one which can be expected to afford a solid basis for a monistic philosophy is matter of general agreement and may be taken as certain. That it has done so more frequently than many philosophers would be willing to admit is, I think, no less certain. The view that the universe must be in some sense conformable with our wishes has been the mainspring of much philosophizing. In approaching the problems of metaphysics philosophers have unconsciously remembered their wishes and constructed systems that reflected them; they have asked of a theory put forward for their consideration not whether it is true but whether it is desirable that what it asserts should be true, thus elevating the characteristic of desirability which is a reflection of our own emotions about reality into a criterion of reality. This is in effect to assert that what secures the approval of the human mind alone possesses a full title to be called real.

The universe may be of such a kind as to satisfy our aspirations; it may, in other words, be what we call good. But we cannot know that it is. We do not know the whole nature of the universe and are not therefore in a position to make statements about its characteristics; we cannot assert that it is such as to satisfy human desires, to secure moral approval, or to fulfil human needs. We cannot, in fact, affirm anything definitely about it one way or the other. What we can assert, however, is that there is no *à priori* reason why it should be of this character. Certainly the fact that it is a universal human longing, or an indispensable pre-requisite of human thinking (if, indeed, it is a fact) that the universe should be spiritual, or that it should be a unity, does not constitute such a reason. We cannot allow our minds to dictate to reality in this way, nor have we any right to insist that a need of ours points to a corresponding fulfilment in nature. Such an assumption would indeed be justified only if we already knew that reality or the universe was responsive to our needs and amenable to our wishes. The assumption of the possession of this characteristic by reality implies a knowledge of reality which begs the very question at issue.

It is sometimes urged that, although the need which we feel to postulate a fundamental unity is undoubtedly subjective, the situation which gives birth to it is not. Human nature, however we conceive its origin or status, is not something imposed as it were *ab extra* upon the universe; it has evolved and grown out of the matrix of the universe itself, and must needs, therefore, reflect something of the nature of that from which it springs. The characteristics which we discern in the minds and souls of men are not then to be rated as subjective in the sense of being arbitrarily and irresponsibly so; they are rather to be regarded as the unfolding in consciousness of tendencies latent in reality itself, and as owning, therefore, some objective counterpart in the reality they reflect. Reality, it is true, presents from certain points of view an appearance of inexorable determinism, but it also exhibits 'the eternity set in the heart of man'. The dreams that men dream, the aspirations and longings by which they are moved, these too, have been evolved by the processes of the universe, and our conception of reality must not overlook the import of their occurrence.

While then the desire for unity may be subjective, it is not, it is urged, merely subjective, in the sense that its significance can be dismissed; it must be taken to guarantee the existence of some qualification of the real without which it is inexplicable.

Like all arguments which seek to discover an objective validity for subjective feelings this mode of reasoning secures plausibility for itself by the simple process of thrusting further back the problem it professes to solve. It points out that although the need for unity is subjective, the situation in which it arises is not; therefore the objective situation itself implies the unity which the need affirms. But do we after all know this? In asserting that the situation must be such as is required to enable this implication to be drawn, are we not merely reiterating that conformability of the universe with our subjective needs for which we are seeking a justification? Is not this merely to substitute for the assertion 'The universe is a unity, since our minds must have it so', the statement, 'The situation in which there occur minds that must have it so, must itself be of such a kind as to explain and to necessitate this mental characteristic', and are we not, in making this substitution, seeking to apply to the situation in which the need arises the mental legislation which previously prescribed to the universe as a whole?

If, therefore, we are unable to find a satisfactory objective basis for our needs, if we are unable to avoid being both judge and jury in our own cause, if it is our fate both to make demands of reality

and to insist that reality must be of such a kind as to satisfy them, should we not try to reduce our demands to a minimum? That we cannot transcend ourselves is true, and some degree of mental dictation to reality there must needs be, but it should be repressed rather than encouraged. Instead of assessing the truth of a theory in terms of the spiritual comfort it brings us we should rather look with suspicion at beliefs which seem to encourage our hopes. To look askance at systems which bear too obviously upon them the impress of human need is not cynicism but elementary caution, and the belief that the universe is a unity, so far from being hailed with acclamation because it responds to our most intimate longings, should for that very reason be the more closely examined.

Apart from these general considerations there are two reasons of a more particular character why the philosopher should arm himself against the seduction of monistic views. The first is afforded by a consideration of the nature of ethical value. The desires and hopes which some philosophers demand that the universe should satisfy are, it may be conceded, the highest of which our nature is capable. It is not a universe such as the cruder hedonist envisages, but one that is morally good that is implied in the requirement that it shall be a unity. No thinkers, indeed, have insisted on the ethical character of the real more earnestly than those who have sought to exhibit it as fundamentally one.

That the universe may in fact reveal itself as ethical in character I do not wish to deny; it is part of my thesis that the reasoned assertion or denial of this or that as a character of the ultimately real is at our present state of evolutionary development inadmissible. But this at least may be affirmed, that a universe which is viewed as morally praiseworthy because of the need we have to find it so is to a deeper view robbed of the very value which it is desired to ascribe to it. A real which is amenable to our wishes, and which permits itself to be modelled to the requirements of our thinking, must of necessity partake of and be continuous with our wishes and our thoughts. Only on this assumption can we explain its responsiveness to them. But a universe which we ourselves have made or in whose making we have at least played a part is divested of that element of objective value which we are so anxious to discern in it. A world which can be fashioned after our heart's desire is for that reason not the world which our hearts desire.

> Ah, Love! could thou and I with Fate conspire
> To grasp this sorry Scheme of Things entire,
> Would not we shatter it to bits—and then
> Remould it nearer to the Heart's Desire!

It is of the essence of value that it should be independent of that which finds it valuable, that it should be, in other words, discovered not created. If it can be brought into being by the very longing we have for it, if, in short, it can be constrained by the very vehemence of our desire, it can afford no real or lasting satisfaction. The universe may be good; but, if it is, its goodness is of an objective and impersonal character, which is not to be solicited by our importunity. It may be apprehended of men, but it is not to be constrained by their apprehension. If it is other than this, if it is a character bestowed on the universe by the mere insistence of human desire, it loses ethical value in proportion as it acknowledges a human origin. If, therefore, we are to retain as the object of our search a reality such as we can desire, we cannot be too careful to keep it unsullied by desire.

This brings us to our second consideration. The notion that good and evil are the necessary clues to the nature of the universe is not only destructive of ethical value, but also an impediment to the attainment of philosophic truth. It was not until considerations of ethics were banished from the realm of science that scientists advanced in the understanding of nature. So long as alchemy was concerned with the search for the philosopher's stone, it remained comparatively sterile; it was only when men investigated the nature of matter without hope of personal reward that chemistry was born. So long as it was believed that by studying the movements of the stars men could predict and even influence their own futures, they made little progress in the knowledge of the heavens; it was not until this belief came to be abandoned that astrology developed into astronomy. Physics began as an attempt to show that the structure of the material universe is such as we can admire. Plato's *Timaeus*, for example, is full of ethical considerations. So soon as physicists were absolved from the necessity of discovering that the atomic system bore witness to the working of purpose or the presence of design they attained to an understanding of its nature. In philosophy ethical considerations have lingered longest, the desire to show that the universe is friendly to human nature being the end more or less avowed of most philosophic systems. But the wish to find in the universe an embodiment of our human ideals is apt to be as inimical to fruitful speculation as it has been to scientific research. The growth in human knowledge and power which followed the Renaissance has led to the belief that man must be important in the scheme of things and has inspired a number of anthropocentric systems of metaphysics.

To the special relationship between the humanistic belief in

man's importance born of the Renaissance and dynamic systems of reality I shall return later in the chapter. For the present I am concerned only with the question of the origin and validity of anthropocentric systems. In their formation Kant's philosophy has played no small part; the demonstration of the subjective character of the categories, with the corollary that the universe as we know it is a universe of our making, has carried far more weight in men's minds than the assertion that reality is, and must remain, unknown to us. Upon this foundation has been based what must, I think, be regarded as a false identification of the universe with thought and experience. The universe that we know is experienced; it follows that it must *in some sense* be a whole, if only because it falls within the bounds of a single experience. From the characteristics of the universe that we know men have argued by false analogy to the characteristics of the universe that we do not know. Of these too they have asserted that they must be wholes which are or are capable of being experienced. Yet this inference should not be drawn. Whether there is a universe that we do not know we cannot tell; certainly the universe that we do know does not entitle us to say that there is not, nor, if there is, does it authorize us to make any statement as to its character. It follows then, first, that there may be universes or aspects of *the* universe of which we know nothing, and secondly that there is no reason to suppose of these universes either that they are wholes, in the sense in which the word 'whole' is used by monistic philosophers, or that they are experienced. The point seems too elementary to require emphasis; it is nevertheless true that most of the arguments in favour of supposing that the universe is in some sense mental and in some sense a whole, do in fact overlook it. The frequency of this oversight is, I think, very largely due to men's natural unwillingness to admit the existence of a universe which knows them not, and their wish to construct in its stead a real which satisfies and regards them.

I am not, I repeat, denying ethical attributes to the universe. What I am urging is that a metaphysic which is inspired by the hope of finding them is liable to go astray. *Naturae non imperatur nisi parendo* said Bacon, and the victories of science have been won by the modest attitude which scientists have been willing to adopt in the face of objective fact. They have been content to take the facts as they appeared, and not to demand of them that they should be of this kind or of that; to accept the results to which experiment has led them rather than in the interests of personal hopes to dictate to the universe the conclusions to which it must lend

countenance. It is the same attitude which in practical life expresses itself as humility, and in its religious aspect is praised as submission to the will of God. This attitude is harder to attain in philosophy than in science, owing to the nearness to our emotional life of the questions which philosophy discusses. It is harder to transcend the self when the issues which are raised have so direct a bearing upon its spiritual status and welfare. Yet some degree of self-transcendence must be achieved, some success in emancipating our minds from the importunity of our hopes and the distortions of our desires, if philosophy is to attain that impartial attitude to the universe which can alone command respect for its conclusions. It is the desire for truth rather than for spiritual comfort which should be the motive of philosophical endeavour, and it is only to such a desire that truth is likely to yield.

I conclude, then, that those arguments in favour of Monism which are based upon the assertion that a universe which is a unity, which is ethical in character, and which is not indifferent to human needs, is a fundamental pre-requisite of all thinking, should not be allowed to carry weight. When the philosopher sits back in his chair and allows himself to speculate about the universe at large, dismissing what is in favour of what must be, his results are likely to be of more interest to the psychologist than to the metaphysician: they tell us about the nature of the philosopher rather than about the nature of reality. In so far, however, as any weight can be allowed one way or other to considerations touching the question whether the results at which a philosophical system arrives are morally satisfactory or the reverse, the presumption is in favour of those which represent the universe as unfriendly and indifferent to human wishes. Comfortable truths tend to be embraced because they are comfortable; in favour of uncomfortable truths no consideration can be urged but their truthfulness.

One further point may be mentioned before we proceed to discuss Monism on its merits. Assuming that the longing for unity is an instinctive and universal need of the spirit I have been concerned to estimate the degree of weight which should be allowed to it. Most monists do after all implicitly make this assumption, and I have tried, therefore, to meet them on their own ground. But is the assumption itself a necessary one? Waiving for the moment the question of the metaphysical validity of our instinctive needs, we may ask whether the hypothesis of a fundamental unity is a universal need in the sense suggested. That it exists nobody would wish to deny, but the history of philosophy bears witness to the fact that it is far from being universal.

Apart altogether from the more defiantly pluralistic systems of philosophers like William James (who nevertheless unconsciously gave hostages to Monism, as I shall try to show), we find a multiplication of reals embodied in the metaphysical conceptions of many of the great philosophers. For Plato the basic reality of the universe is a company of Forms, which are only in occasional unrepresentative passages subsumed under and reduced to a single principle, such as the Form of the Good. For Aristotle God exists both as the object of desire and as the contemplator of mathematical and immutable entities. In neither capacity is he the sole type of reality. As an object of desire he moves 'the intelligences', that is to say the souls of the first heaven, the sun and the stars. The movement of these bodies, which accounts for the rhythm of the universe and the eternal change which is characteristic of all living things, springs ultimately from the desire of the heavenly bodies for God. Not only does this imply a fundamental separation between God and the beings which desire him, but we are explicitly told that the relationship involved must be one of desiring and desired, since any other kind of connexion, that of physical causation for example, would require material contact. Material contact involves the reaction of the moved on the mover; such reaction would imply a fundamental continuity between God and the universe which is incompatible with the aloofness of the first mover, who is expressly placed at the outside of the universe.

As to the objects of God's contemplation, it is true that God is usually spoken of by Aristotle as the self-knower, since God can know only what is best, that is to say himself. There are, however, passages in which entities of a mathematical character are invoked as the object of God's contemplation.

As I am not concerned to show that there are no traces of Monism in Aristotle but only that Monism is by no means a necessary belief, and one that has not always as a matter of historical fact been held by the greatest philosophers, it is sufficient for my purpose to indicate that Aristotle sometimes postulates a plurality of reals, as between God and the objects of his contemplation, even if it also be true that God contemplates himself as self-knower. The point has a direct bearing upon the view of contemplation as being characteristic of the most advanced stage of life's evolution, which will be advocated in Chapter VIII, since contemplation which necessarily involves the existence of something other than the contemplator, involves also a plurality of reals. In any event, however, the fundamental distinction between God and the universe, a distinction which is made as rigid as possible by Aristotle's statement

that the only relation between them is one of desire and desired, cannot be over-emphasized.

To take one more example from a system of philosophy widely separated in point of time and place from that of Aristotle, and imbued with a different spirit, it may be noted that the Buddhist's universe is essentially pluralistic. For the orthodox Buddhist, and I am speaking here of the essential doctrines of the original Buddhism as opposed to later developments and accretions, the essential nature of the universe is a flux of impermanence; there is no Being, there is only Becoming. But this flux is not itself featureless; it is composed of constituent parts which come together to constitute an individual, whether person, thing, or God, who in respect of his individuality is temporarily separated from the flux. Thus each individual is essentially a putting together, a compound, or union of different factors. The union of these factors in the flux is itself unstable and impermanent, and the individual compound is never, therefore, the same for two consecutive moments; but as to the fundamental distinction between the different constituents that separate themselves from the flux to make the individual there can be no doubt. Thus the fundamental character of the real is asserted to be not only a flux, but a plurality of diverse factors which can be discriminated and separated from the flux.

There is no need to multiply illustrations of what I can only call the instinctively pluralistic attitude of many thinkers to the universe, but mention should be made in passing of the large number of religious systems in which the universe is divided between an evil spirit and a good; of these the twin spirits Ormuzd and Ahriman of Zoroastrianism, and the uncompromising dualism of the Manichees afford, perhaps, the most famous examples. There is no ground then for the view that a monistically conceived real is a *universal* need of the human soul.

II. CRITICISM OF MONISTIC THEORIES.

I shall now proceed to a consideration of some of the forms in which Monism has been advocated, and state what appear to me to be the difficulties to which it is exposed. Since the objection which I wish to urge is fundamentally the same, varying only in form according to variations in the form which Monism itself has assumed, a very brief treatment of the different monistic theories will be sufficient for my purpose. I propose, therefore, to refer to a number of typical statements of the monistic view of the universe, and to show in each case what the difficulty is to which the statement appears to be exposed.

(1) *Theological Monism.*

I begin with those forms of Monism which, affirming the existence of a personal God as creator of the universe, identify this creator with the whole of reality, and will take first as a typical expression of Oriental metaphysics the Monism of the Indian philosopher Sankarachaya.

(A) Sankarachaya's philosophy starts from an epistemological dualism which is not markedly different in type from the theories of the modern realists. Knowledge, he held, is a relationship between a subject and an object; the relationship is that of awareness of the object by the subject, but neither the awareness of the subject nor the object of which there is awareness is dependent for its existence upon or reducible to the other. Presently, however, Sankarachaya abandons this somewhat naïve realism and proceeds to point out that in knowledge not only are subject and object related, but that they are also adapted to each other. If it were not for this adaptation they would never be able to 'get at each other' in the sense that knowledge of the one by the other implies. This adaptation cannot be regarded as a merely fortuitous occurrence; it can only be explained on the assumption that both the entities adapted are expressions (or creations) of something more fundamental than either. Since both are expressions of or emanations from this more ultimate something there is a kinship between them which proves their apparent twoness to be illusory. (The argument here is strangely reminiscent of Professor Royce's explanation of what is implied in the fact that the cat is able to look at the king.) Sankarachaya suggests that this more ultimate something is spirit, and identifies it with God.

The world, then, is a creation of God, who is the reality which underlies and expresses itself in all the diversities and appearances which are creations of or emanations from Him. But why, asks Sankarachaya, should God create, assuming, that is to say, that God is perfect? Activity of any kind implies want or need which the activity is designed to allay. A need implies deficiency in that in respect of which the need is felt; it implies, that is to say, imperfection. A perfect being cannot add anything to his perfection. Furthermore, an infinite being cannot create anything, since, as he is infinite, everything which exists or can exist does so already in him. Moreover, he is beyond time and beyond space, conditions which are necessary to the construction of any material thing, which must be in time and in space. Either, then, God is not perfect and creates the world because he feels some need, or he did not

create the world, in which case he is not infinite, since something, namely, that which he did not create, exists besides and in addition to God.

Sankarachaya states and recognizes these difficulties more clearly, perhaps, than many Western theologians, and answers them by the suggestion that God although perfect is unable to contain himself in his perfection. He feels a need to express himself; so great is his joy, so perfect his goodness that He overflows. Just as the artist inspired by beauty feels a need to express himself by creation, so also was God moved to create the world, not out of any deficiency or lack, but out of the very fullness and abundance of his goodness. The conception is similar to that of the Christian Platonists who thought of God as expressing his eternal purpose in a world other than Himself, by an act needing nought for its consummation save the intrinsic plenitude of his perfection. The suggestion is ingenious, but does not really solve our difficulty. The artist does not merely create; he creates in a medium which is other than that which he creates. If there were no material medium the artist's inspiration would be denied expression. Creation is always creation out of something; expression, expression in something; this, at least, is true of the creation and expression of the artist. Hence, if we are to retain the conception of the artist's self-expression as an analogy on which to conceive God's creation of the world, we must introduce a principle of objectivity which is other than God, in which, or through interaction with which, God expresses himself. The necessity for this principle is in fact realized by Sanakarachaya, and it appears in his work, and indeed in that of many Indian philosophers, under the name of 'Maya'. Here we find a good example of the way in which a philosopher starting with the best will in the world to achieve a Monism is driven by sheer force of logic to postulate a Dualism.

The problem of the creation of the sensible world seems indeed, if honestly faced, necessarily to demand for its solution the introduction of some principle akin to Sankarachaya's Maya, a solution of the problem of becoming which receives, perhaps, its most famous illustration in Plato's metaphysic. God, for Plato, is a Being described in somewhat vague and mystical terms. Nothing indeed could be more unlike the strictly logical statement of the Theory of Ideas with its precise formulation of the attributes of the world of becoming, than the semi-mythological language in which Plato takes refuge when he comes to speak of God. The Forms are eternal and immutable; they are not created by God, and they own no kinship with him. Contemplating these

Forms and using them as his model or pattern, God in the *Timaeus* creates the sensible world. The sensible world then is the result of the modelling by God of some alien material which is other than the Forms and other than God on the pattern of the Forms. Hence we are asked to postulate the existence of three irreducible principles, God, the Forms, and the material out of which God moulded the sensible world. At other times the sensible world is spoken of as the result of the manifestation of the Forms in a kind of brute and formless substratum, the disorderly, unformed material of the world of matter; again as an amalgam of complete being and complete not-Being; and yet again in the *Timaeus* as a combination of the Same, which symbolizes the eternal self-identity of Being, and the Other, which stands for indeterminateness, mutability, and variability. Through all these different forms of expression Plato is endeavouring to convey his sense of the impossibility of accounting for the phenomena of the sensible world in terms of one principle alone. The sensible world is neither Being nor not-Being; it floats about as it were between the two, and requires the assumption of two different poles or principles in terms of which alone it can be rendered intelligible. It is obviously not pure Being, since it changes, but it is not pure not-Being, since in some sense it exists; we can only, therefore, think of it in terms of the manifestation of one thing in the medium afforded by another. A somewhat similar conception will be advanced in Chapter IV where the phenomena of organic life will be interpreted as the result of the objectification of a force or principle of life in a material and non-living medium. For the present, however, my purpose is to point out that once again a duality of reals is found to be logically inevitable, so soon as we try to give an account of the relationship between the world of 'reality' and that of appearance.

(B) From the same point of view let us consider the root-idea of Western theology. Its centre is a personal Creator of the universe, who is at once benevolent and omnipotent. Inasmuch as this Creator is regarded as the sole source of all that is, this conception is essentially monistic. The Persian doctrine that the world is the creation of two equally potent spirits, one of whom is essentially good and the other essentially evil, when it makes its appearance under the form of Manicheism in Christian theology is denounced as a heresy of the most reprehensible type.

Since, then, there is no thing, person or spirit besides the personal God or Creator which exists on an equal footing with Him, and is neither logically nor actually dependent upon Him for its being, it follows that whatever phenomena we meet with

in the universe must ultimately derive from Him. Orthodox theology does not, however, proceed to the extreme assertion that everything that exists is to an equal extent God or part of God, the sewer as much as the symphony, the bad deed as much as the good. Even the good deed and the symphony are denied direct participation in God, the doctrine that God is all and all is God being rejected under the name of Pantheism, while even the notion that God is *in* all is denounced as animistic. God indeed may be immanent in and responsible for these things in the sense in which a man is immanent in and responsible for his shadow, but they are not God and God himself is other than they. God is conceived as a perfectly complete and completely separate Being; as such he transcends this world that He has created, so that the complete abolition of the sensible universe, including also the world of mind, would not affect God, or impair his being. Yet—and in this the mystery of immanence consists—although the universe is in a sense other than God, and, once created by Him may within certain limits which He has foreordained, proceed in virtue of the gift of free will upon its own lines, yet, in another sense, it is a projection of God himself, loved by Him as a son is loved by a father, and this it is of necessity, since, as God is ultimately the author of all that is, the sole reality and source of the universe, all phenomena must ultimately derive from and owe their being to Him.

I do not discuss here the numerous important issues which this conception raises for philosophy. I wish only to draw attention to one particular difficulty to which it is exposed. I draw attention to this difficulty because it is fundamentally the same as that which I wish to urge against monistic systems of philosophy of the Absolutist type. To put the point in another way, the problem of pain and evil, which is the difficulty to which I refer, is I think at bottom the same problem as that of diversity and error.

The problem of pain and evil is, of course, a familiar one, and the point which I wish to make in regard to it has been made in many different ways by other writers. Nevertheless, it must be stated as briefly as possible, if only because it indicates what is in my view the fundamental flaw of all monistic philosophies. Pain and evil are either real in precisely the same sense as that in which happiness and virtue are real, or they are unreal in some sense in which happiness and virtue are real. Let us assume first that they are real. If they are real, they were either created by God or not created by him. If they were created by God who, being omnipotent, is bound by no limitations and constrained by no necessities, they must have been deliberately created. But the being who wilfully creates

pain and evil cannot be wholly benevolent, since he could only create them in virtue of some fundamental flaw or taint in his own make-up of which they are the expression. Evil then is fundamental in godhead, just as goodness is; God in fact is not good through and through, but is himself the ground of two different principles, that of goodness and that of pain and evil, which rise up as it were behind him. This conclusion is essentially dualistic. If God did not create pain and evil they must have existed independently of him, and we may add, if his benevolence is to be maintained, in despite of his will. The universe, therefore, may be conceived, as many have conceived it, as a field in which two contrary principles contend, that of God's goodness, and that of the evil to which it is opposed.

It is, of course, possible while retaining the conception of an omnipotent and benevolent creator as the foundation of reality to attribute the existence of pain and evil to the wickedness of man or of some other created intelligence, the continuance of which is countenanced by God for some inscrutable purpose of his own. This does not, however, remove our difficulty. The creature can derive the wickedness in virtue of which he creates pain and evil from no source other than God. If God were entirely good He could not create a being who was evil in respect of that being's potential creation of pain and wickedness, since the voluntary creation of a potentially evil being carries with it the implication that the creator is himself at one remove the potential source of the evil which the potentially evil being creates. But a source qualified by such a potentiality is not completely good, the principle of evil being already latent in it.

Even if we grant the possibility of such an act as is involved in the creation of a potentially evil creature by an all good God, it is nevertheless clear that it could not be committed without impugning the goodness of the agent. Even if we say that the creature possessed no endowment of wickedness in the beginning but deliberately generated wickedness out of nothing, we cannot but assume that God in creating the creature must have had foreknowledge of future developments. Apart, therefore, altogether from the difficulty of explaining how the creature who is an emanation from or creation of God's will can will with a will which is other than God's, we are faced with the fact that, on this view, God deliberately permitted the creation by his creature of pain and evil which did not previously exist, and sponsored their introduction into a world which knew them not, when he might have prevented it. Here, then, we are faced with the same dilemma as before. If He

did not wish to prevent it, He cannot be wholly good; if He had not the power to prevent it, He cannot be wholly powerful. Either alternative demands a dualistic hypothesis; a God who is partly evil is himself the embodiment of two warring principles; a God who is powerful only in part is limited by something other than Himself.

Let us now assume that pain and evil are unreal in some sense in which happiness and goodness are real. Those who hold this view are accustomed to regard this world as a place of training and discipline, in which man is constrained to dwell for a space in order to fit himself for the company of God and his angels in a state of perfection hereafter. In this vale of suffering man is chastened and purified, and the dross of his nature, inherited from the days of the Fall, is purged away. If he fails in the test he will, according to some, be doomed to suffer an eternity of pain at the hands of evil personified. (This view of pain and evil continuing into eternity is difficult to reconcile with the belief that they are in some sense unreal. It might, perhaps, be argued that the wicked do not in the hereafter really exist, and that what they undergo is not, therefore, truly real.) If he succeeds he passes into a state of eternal bliss in which he ultimately (on some views) loses his individual identity in the all-embracing goodness of God. Since, therefore, pain and evil have only a temporary existence, an existence which is relative to a special purpose, since they pass away and are succeeded by perfect goodness and perfect well-being, and since the whole of this world in which they appear to hold sway will one day disappear, they may be said to own no part or foundation in the nature of reality.

This view seems to be exposed to the following objections.

(i) The process envisaged is pointless. It starts with the conception of the absolute unity and perfection of God; out of this unity emerges a world containing among other things human beings and what appear to human beings to be pain and evil. Human beings are tested by pain and tempted by evil. If they withstand the test successfully they are reabsorbed into the unity of God; if not, they are eternally abandoned to a pain and evil which must now be regarded as real. Here then is a process of which, if all goes well, the end is not because it cannot be better than the beginning. The beginning is absolute unity, absolute reality, and absolute perfection; from it emerges a process involving pain and evil by the way, of which the best that can be expected is a termination in unity, reality and perfection.[1] Such a process is surely

[1] This is, I think, the usual Christian view, although theologians are not so explicit as one could wish. If, however, it be maintained that individuality

meaningless, and the development which it postulates is at the best circular, at the worst retrogressive.

(ii) There is no doubt that we think that we suffer; there is no doubt also that we believe that certain things are evil. Therefore we regard pain and evil as real. If they are in fact unreal we are deceived as to their nature. God, who presumably knows their real character as unreal, deliberately deceives us, therefore, in regard to it. This deception is either voluntary or necessary. If it is voluntary we can no longer regard the being who practises it as entirely good; if it is necessary he can no longer be regarded as completely powerful, for being constrained by necessity he confesses his inability to overcome the limitation which the necessity imposes. It is only a limited being who feels the need to deceive; an unlimited being can accomplish his ends without resorting to such a device.

We are faced then with the necessity of reconciling an all-powerful and an all-good Creator with the existence either of pain and evil, or of error and deception. For one or other of these things He must be regarded as responsible; yet such responsibility does not appear to be reconcilable with the assumption of his unlimited power and goodness. I submit, therefore, that the monistic conception of a benevolent and omnipotent Creator as the sole source of all that is, cannot be made to account for the phenomena of existence as we know them. Even if such a Creator be admitted we are driven to postulate some opposed or limiting principle against which he is forced to strive, or some alien and intractable material in which he is forced to create. Either conception is dualistic.

It is perhaps unnecessary to add that the view of God as creating the world for his own malicious entertainment, which Mephistopheles unfolds to Dr. Faustus, is as difficult to reconcile with the phenomena of goodness and happiness which the universe undeniably exhibits, as the view of him as entirely and completely good is with the existence of pain and evil. It is a part of my thesis that, whatever be the fundamental nature of reality, it cannot be all of a piece; reality, therefore, is two principles, or is at least two.

(2) *Philosophical Monism.*

In the light of what has been said we may now turn to a consideration of philosophical systems of Monism. These may be divided

persists through eternity, then the universe, which begins as a unity, namely God, ends as a plurality. This, on monistic views, is not a consummation to be desired.

into two classes; A. those which assert that the universe is fundamentally a static changeless unity which is a structure of thought; B. those which regard the universe as constant change, or as a nisus, flux, or impulsion which is constantly changing. It is with theories of the second class that we are chiefly concerned, since they include most of the Vitalistic systems of metaphysics hitherto propounded. Something must, however, be said of the idealistic Monism which was dominant in this country at the close of the last century, and finds different though closely related expressions in the philosophies of Hegel, of Bradley, and of Bosanquet.

(A) *Idealistic Monism. The universe as thought.* I do not wish to cover familiar ground by recapitulating here the considerations upon which the impressive structure of Idealistic Monism has been built, or by enumerating the criticisms which such thinkers as William James and Bertrand Russell, each from a different standpoint, have advanced against it. Both James and Russell are philosophers of the first rank; their works are classics, and I may fairly assume that their contents are more or less familiar to those who will read this book. It will be sufficient, therefore, if I indicate in a few sentences the outline of the theory, or rather of that part of the theory with which I am chiefly concerned, and the main arguments upon which it is based. I shall then try to show that these arguments are fallacious, and that partly for this reason, partly because of its own inherent contradictions, the Monism of the great Idealists is an untenable metaphysic.

Since the particular aspect of Monism with which I am concerned is common to the works of Hegel, Bradley, and Bosanquet, I may be taken in what I say to be referring more or less indiscriminately to all three. However much they may differ in other respects they are all for my purpose Monists in common.

The extreme form of intellectual Monism is that of Spinoza. For him the fundamental substance of the universe is completely indeterminate; it is endowed with an infinity of attributes. Therefore, since any *specific* determination would impair the Absoluteness of this real, it is characterized by no positive mark such that it may be said to have it rather than not to have it.

Modern idealists abate something of the full rigour of this doctrine in order to enable themselves to give what Spinoza could not give, a plausible account of the plurality of the world of appearance. Thus, for Bosanquet the universe is a homogeneous whole. This whole is the reality which expresses itself in the world of diverse appearances, and although the whole is manifested in each one of its appearances, it is nevertheless itself not appearance but

reality. As such it includes everything just because it is everything, and nothing can, therefore, exist which is not it. Since it is wholly present in each of its manifestations, these only appear as isolated and fragmentary parts of the whole to which they inalienably belong and from which they are falsely separated, because of the partial character of the vision which we bring to bear on them. The whole, therefore, never loses its character of complete unity in any one of the fragmentary appearances in which it manifests itself. It only *appears* to do so, the appearance of change and plurality arising because, in Bosanquet's words, 'a true infinite, in being expressed through finite terms, such as those of our experience, can never be adequately expressed; but' nevertheless 'being a true infinite, it is represented as a whole in each of its revelations, and does not move from its character of totality to enter into them.' [1]

Whatever may be true of the world of appearance the whole of reality is itself changeless; it does not develop or evolve. Bosanquet repudiates, for example, the suggestion that 'the whole which is the entirety and foundation within which all these partial constructions are revealed to thought, is itself occupied in the passage . . . from worse to better, from disvalue to value'.[2] Again, 'if the basis of the universe were changeable, the basis of our argument, whatever it might be, would vanish with the stability of the whole'.[3] 'The universe is all that exists. . . . Its nature reveals itself in changes, partial and correlated; but there is nothing to justify a suggestion that *the whole* changes its nature.' [4]

This unchanging whole which is the universe is also mental; it is a structure of thought or experience. To quote Bosanquet again. 'Where there is no universal mind, no all-inclusive experience, there is, for us, no unity of the universe'; [5] the universe, therefore, is mental because it is known by and in being known necessarily avows itself a part of one all-embracing experience, which is itself. This conception is well founded in the best traditions of philosophical thought and needs no further elaboration here. For many philosophers, indeed, all roads lead to the Absolute and every philosophical question can be so treated as to contribute to its support. Of the many different lines of argument upon which the monistic position is based two specially concern us here. One is the argument from the nature of relations, another—a special case of the first—from the nature of parts and wholes.

The argument from relations is based upon the principle that all

[1] Bosanquet, *The Meeting of Extremes in Contemporary Philosophy*, p. 113.
[2] Ibid., p. 190.
[3] Ibid., p. 191.
[4] Ibid., p. 192. [My italics.]
[5] Ibid., p. 170.

relations are internal; relations constitute, that is to say, an integral part of the terms they relate. Briefly, it is as follows: if the qualities of a thing were to be stripped away there would be nothing left over to sustain the qualities. This conclusion was established once and for all in philosophy by Berkeley's indictment of Locke's apocryphal substance. What is true of the qualities of a thing is true also of its relations. If *A* were not larger than *B*, like *C*, and, we may add, known by *D*, it would not be the particular kind of entity which it is. Therefore the size-relation to *B*, the resemblance to *C*, and the being known by *D*, are in part constitutive of the nature of *A*. *A*, therefore, does not exist as a complete and self-sufficient entity in isolation, simply because in isolation it is other than it is found to be when taken as a unit related to other units in a whole. Its relations, in short, form part of it, simply because it would not without them be itself. It cannot, therefore, be known as a single independent unit, if only because as a single independent unit it is not real.

A special case of the axiom of internal relation is afforded by the relationship of parts to wholes. There is a common sense distinction (although since every aggregate is in this philosophy in some aspects a whole, it is not one which can in the long run be maintained) between the whole and the aggregate. The aggregate (if indeed there is such a thing) is a mere collection of independent units; the whole is an organic unity which determines and is in turn determined by its parts.

It is clear, for example, that a symphony taken as a whole is something over and above the sum total of the individual sound vibrations which from one point of view may be said to be its component parts, the living organism more than the sum total of its individual organs, the State than the collection of its individual citizens. What is more, each note taken by itself (if, indeed, it could be so taken) is different from the note considered in its relationship to those that come before and after it with which it vibrates in harmony; i.e. it is different in isolation from what it is as occupying an integral and essential position in an organic whole. What is true of the note is true also of the bodily organ and of the individual in society; these too are what they are only because of their relationships with the other parts of the whole to which they belong and also with the whole itself. Two results emerge: to consider a whole as merely the sum of its parts is to falsify it, since the collocation of the parts brings into being a new entity which is something over and above the mere collocation; secondly, the relation of the parts to each other so modifies and transforms the

parts that as parts of the whole they are literally different entities from what they would have been when taken as isolated units.

Now every part is itself a whole of other parts, every whole a part in other wholes; it follows that the conception of the universe as a collection of self-sufficient units existing in isolation from one another is a falsification of its real nature, which turns out to be an all-including whole, a whole which is determinative of each of the parts which to our finite and falsifying vision, though not to mature reflection, appear isolable from the rest. I cannot do better in summarizing this conclusion than quote Joachim's definition of a significant whole. 'The whole,' he says, 'is significant, one that is such that all its constituent elements reciprocally involve another, or reciprocally determine one another's being as contributory features in a single concrete meaning',[1] while, to quote from Bosanquet for the last time on the special aspect of this doctrine which he made peculiarly his own, we cannot 'attend to the common substance of particular wills in the family and the State, and yet believe that it can be reduced to a similarity of particular finites, between which there is no objective identity'.[2]

The doctrine asserts, in short, not only that there are such things as wholes which are more than the sum total of their parts, but that only wholes of this character are ultimately real, the independent reality of the parts as parts being impugned by means of the axiom of internal relations. A somewhat similar doctrine has recently been put forward from an entirely different standpoint by General Smuts in his book *Holism and Evolution*. He there contends that the process of evolution, which for him is a real process in time, is a process of whole-making. Each fresh whole is an integration of more elements, that is to say, of more rudimentary wholes than its predecessor, the object of evolution being the achievement of a whole which shall include within it all other wholes as parts of itself. Meanwhile each fresh whole in which the process of evolution expresses itself, since it integrates more elements than its predecessor, may be regarded as more highly developed and for that reason more whole-like. Not only is the test of wholeness to be found in the number of elements subsumed within the whole, but wholeness in this sense is made the test of reality; the more a thing is a whole, the more it is real. We arrive then at a conclusion not dissimilar from that of Hegel and the English Idealists, that the only thing that possesses a full title to be called real is the whole of wholes, the whole of all that is, although it should be pointed out that General Smuts, as opposed to the

[1] Joachim, *The Nature of Truth*, p. 66.

[2] Bosanquet, *op. cit.*, p. 170.

Idealists, does not regard this complete and completely real reality as yet existing, but envisages its emergence as the goal of evolution.

Criticism of Idealistic Monism. It is less with the arguments upon which idealistic Monism is based than with the inherent contradictions of the theory itself that we are here concerned. Nevertheless, something must be said, however briefly, and however familiar the line of criticism, with regard to the two sets of arguments we have just summarized.

The principle of internal relations is ultimately the crux upon which the issue between Monism and Pluralism turns. It may, I think, be conceded that everything is related, if only by relations of likeness and unlikeness, to everything else in the universe. But it is, I think, clear that it only can be so related because there is something to relate; this something is the entity which is related, and just because it is related and has relations it cannot be the same as the relations which it has. If the entity were in fact composed of its relations it would be logically indistinguishable from and resolvable into them. By 'an entity', therefore, we should have to understand 'the relations of the entity' (assuming that there were such an entity independently of its relations, which on this view there is not) 'to all the other things in the universe'; therefore that which the relations relate, that which *has* the relations, turns out on analysis to be the relations which it is said to have. Since the same analysis is applicable to the other 'entities' in the universe to which '*the entity*' is related, the universe resolves itself into a set of relations with no terms to relate. The denial of the externality of relations seems, therefore, to lead to a denial of relata. In other words we may say that you cannot impugn the uniqueness and logical independence of terms without abolishing them altogether. The universe which results is certainly a homogeneous whole, but it is a whole which, since it is shown to be devoid of terms, is, like Spinoza's, a mere blank unity; it is a whole of nothings. The difficulty into which the argument leads us arises, I think, from a confusion in regard to what is meant by the nature of a thing. If 'the nature of a thing' includes all the truths about the thing, then it follows that the relations which the thing has to everything else, which are quite certainly part of the truth about it, form part of its nature; it also follows that we cannot know the thing without knowing everything there is to know about it, which means knowing every other thing in the universe to which it is related. But the truths in question are only true about the thing because there is a thing for them to be true about, which is other than they. It is true, for example, about an egg, that if kept too long it will

smell; but this truth is only true because there is an egg, and the egg is what it is independently of the truth, and it is about the egg as it is independently of the truth that the truth is true. If the truth were part of the egg then the truth would be true about itself; the egg in short would be simply the collection of the truths which were true about it, and the truths not being true about anything but one another would cease to be truths.

The monistic doctrine asserts that the rest of the universe must be understood before anything can either be or be known; but the rest of the universe has no need to be understood; it is initially given. A thing, then, is *given* in its relationships; and, in saying that it is so given we are implying that it is itself other than they. Not only is it other than they; it is logically prior to them. A thing determines its relationships; they do not constitute the thing.

English Idealists have frequently criticized the neo-Idealist theory of progress on the ground that in regarding the universe as being itself movement in time, a *progressus ad infinitum* without beginning or end, they have provided for nothing to sustain the progress. Where everything is process there is nothing to and in which the process can occur; hence a universe which is itself progress and nothing but progress is a universe which is void; it is a unity, but not a universe. It is precisely to this criticism that, as it seems to me, the doctrine of internal relations is itself exposed. A thing which can be analysed into its relations with the rest of the universe is divested of logical integrity in the process; where a thing is conceived as the sum of its relations nothing is left to sustain the relations; and, since what is true of any one thing is true of the rest of the universe to which the thing is related, the universe is left void and featureless. It would eke out as precarious an existence as the inhabitants of that island who lived by taking in each other's washing.

I turn now to the doctrine of wholes and parts which may be regarded as a special case of the doctrine of internal relations, since the arguments in favour of the belief that the parts are only real as parts of a whole are deducible from the view that the relations which bind the parts to one another and also to the whole, are themselves constitutive of the parts.

In so far as this belief rests upon a distinction between a true whole, which is an organic unity, and a mere collection of isolated units, it seems to prove too much, since, if the arguments adduced in its favour are valid, there can be no such thing as a *mere* collection. If the axiom of internal relations is true then the members of, say, a heap of stones are related to one another and also to the whole heap in precisely the same way as, say, the organs of the

body, or the citizens of a State. Each stone, on this view, is what it is only because of its place in the heap; the place which it occupies in the heap and its consequent relations to other members of the heap are, therefore, factors which may be justly regarded as determining the nature of the stone.

It seems to me, then, that the argument for Monism derived from the nature of wholes, so far as it rests on a distinction between wholes and aggregates, falls to the ground, since in applying equally to the aggregate and to the whole it proves that every aggregate is a whole, and so abolishes the distinction between them. My own view is that the distinction between whole and aggregate, in so far at least as aesthetic and vital wholes are concerned, is a real one. I have already argued in Chapter I that the living organism is a whole or unity, and that the mechanistic treatment of it as a collection of interacting organs by ignoring the essential fact of its unity falsifies its nature. A symphony, again, which from one point of view may be regarded as a collection of notes, is nevertheless a collection of a different order from the collection which is constituted by taking, say, five hundred notes at random from the same symphony. The symphony may, therefore, on my view, justly be regarded as a whole which is more than the mere arithmetical sum of its notes. The reasons for this view raise issues which are not strictly germane to the subject-matter of this chapter, and they will, therefore, be given in a later part of the book.[1] Meanwhile, I emphasize the point that it is precisely because I believe that there is a real distinction between wholes and aggregates that I am unable to accept the monistic argument which, if logically pressed, leads to the conclusion that every aggregate is also a whole.

For the present, however, I propose to waive the question of this distinction, and to consider whether the monistic account of the nature of a whole, an account which takes us over the first stage on the road to the whole of wholes which is the Absolute, is such as we can accept.

Unless a whole is a mere blank unity, as void of feature as, say, a sheet of white paper, it is clear that it must have parts. Monists specifically speak of the wholes under discussion as 'syntheses of opposites' or as examples of 'unity in diversity'. In order, then, that the whole may be a real whole and not a featureless unity it is necessary that its parts really should be parts. But in order that they may be parts it is further necessary that they should possess characteristics in their own right, which are other than those which

[1] See Chap. VIII, pp. 346–51, on teleological and *ab origine* explanations.

they derive from their place in the whole. If they did not possess specifiable qualities which are really their own qualities, they would lack that which is an indispensable condition of their being anything at all. But if they possess some qualities in their own right which are not derived from their place in the whole, it is clear that they can pass into and out of any whole in which they may be found without loss or modification in respect of these particular qualities.

Now it is agreed that when parts are subtracted from the whole to which they belong that particular whole is destroyed; it does not, however, follow if the above argument is valid that this involves the destruction of the parts. If, then, the whole is a real whole and not a blank unity, and if, as a consequence, it really has parts, and these parts have qualities which differentiate them one from another, it cannot be a fiction to distinguish them from the whole, and to envisage them so distinguished as existing outside the particular whole to which they may belong or have belonged.

This result appears most clearly in connexion with numerical wholes. Twelve, to take an example of Bosanquet's, is a numerical whole of which the parts are the numbers seven and five; yet it is clear that the numbers seven and five have reality in their own right, that this reality is not destroyed by their ceasing on any particular occasion to be parts of the whole twelve, and that they may, therefore, become parts of other wholes without any alteration of their natures. So far from the nature of parts being determined by wholes, it is only because they are what they are independently of the wholes to which they belong that they are able to combine to constitute and to determine the nature of the wholes of which they are parts.

A whole, then, is not, because it is a whole, a real of a kind different from and superior to its parts, nor are its parts determined in their nature by participation in the whole, in such a way that they are incapable of existing outside it. Once we impugn the integrity of parts as independent, self-subsistent entities, we transform the whole from a synthesis of distincts into a blank unity devoid alike of complexity and structure. In reducing itself to this conclusion the idealist position is again exposed to the difficulty previously pointed out in our discussion of 'the nature of a thing'. If the parts of a whole are, because of their relations within the whole, denied full reality apart from it, then they no longer afford a sufficient foundation for the whole in the interests of which their reality is impugned. If, in short, the parts are not real as parts, then there is nothing left to sustain the whole.

Even if we were to accept the argument for the superior reality

of wholes, it would not be difficult to show that it does not in fact lead to the result desired, or rather, that it may be used with equal effect to produce the contrary result; the argument, in short, is double-edged. Usually it is invoked to show that parts have no full title to be called real except as parts of the whole to which they belong; the whole is, therefore, real in a sense in which the parts are not, since it can stand by itself and does not owe its being to the fact of its being an integral part of something else. (All finite wholes are, of course, on this view dependent upon some other whole of which they in turn form part, but the whole of wholes is not so dependent and is, therefore, the only thing which is in the long run real.)

Now let us turn the argument the other way. 'There is no creature', says Bosanquet, 'that is not partly modelled by the whole; there is none that in partly modelling itself does not give effect to the operation of the whole within it'.[1] The parts, therefore, are modelled by and only attain significance within the whole; therefore the whole is constitutive of the nature of the parts. Therefore, whatever conclusion we arrive at as to the inferior reality of that which is a part because it is a part, applies also to the whole which makes it what it is. It is not, therefore, true that wholes are more real, or more self-sufficient than their parts.

General Smuts' interpretation of evolution as a process of whole-making also seeks to establish the nature of wholeness as a criterion of reality. The process of evolution is for him a process of integration; entities hitherto distinct are brought together as parts of a whole, the whole finds place in a larger whole, and so on until all the multitudinous facts of the universe are correlated as parts of one all-including and perfectly harmonious whole. Meanwhile, the new whole which emerges at each fresh level that evolution attains, just because it is a richer and more complex whole than its predecessors, is real in a deeper and more important sense than any of the wholes which have emerged before it.

This position embodies two rather different contentions. The first, that a whole is real in some sense in which the parts, that is to say the wholes which it subsumes and transcends, are not, has already been discussed. The second, that a whole advances in point of wholeness in proportion to the number of different parts it contains, so that later-emerged wholes, being wholes of more parts, are more real than earlier ones, seems to be quite certainly false. A pudding which is composed of a dozen ingredients is no more of a whole than a pudding composed of six; a cake which is

[1] Bosanquet, *The Meeting of Extremes in Contemporary Philosophy*, p. 189.

cut into ten slices no more of a whole than a cake which is cut into two halves. On the contrary, the stability of wholes which are integrations of many parts seems more precarious than that of comparatively simple wholes. A man is obviously a richer and more complex whole than an amoeba, but he is not for that reason more harmoniously integrated. On the contrary, the amount of unity or wholeness possessed by a man seems to be definitely less than that of the amoeba. He can, for example, be at war with himself and to that extent be presumably diminished in wholeness, in a sense in which we may, I think, assume that the amoeba cannot; we have yet to hear of cases of dual personality among amoebas. Yet a man is, to use General Smuts' language, a later-emerged whole than the amoeba. So far from evolution being a process of whole-making in General Smuts' sense, it appears rather to illustrate the precisely contrary formula of Herbert Spencer which represents it as 'a process whereby an indefinite, incoherent homogeneity is transformed into a definite, coherent heterogeneity'. The later evolved wholes admittedly contain more elements, but it does not, therefore, follow that they are more whole-like.

The disposition to represent evolution as a process of whole-making, like the attempt to establish wholeness as a criterion of reality, appears to be directly derivable from the tendency to think of the ultimate real as a homogeneous unity in which the plurality of the world of appearances is transcended. Yet, if we have reasoned aright, the arguments brought forward in support of these positions are not such as can withstand a detailed examination.

Our analysis of the theory of internal relations and of the doctrine of wholes and parts has brought us to a point of vantage from which we may proceed to a criticism of the central doctrine of Idealistic Monism. For the arguments for the integrity of terms apart from their relations, and of parts apart from the wholes to which they belong, may be logically developed into a general criticism of the conception of reality as a fundamental homogeneous unity expressing itself in diversity.

In considering a similar position in its theological expression I pointed out (pp. 41, 44) that its central difficulty was to explain how an infinite unity can be the source and ground of the finite and the plural. If the finite and the plural are real, what are their relations to the infinite unity which is also real? If they are unreal, how comes it that we think them real? This is the difficulty whose implications we must now examine a little more closely.

It presents itself in the most unmistakable form in connexion with Spinoza's universal ground. This, as I have said, is ulti-

mately without specific feature or determination of any kind; its Absoluteness indeed is conditioned by and dependent upon the very absence of specific features. How then are we to account for the development out of this unity of the infinite diversity of Spinoza's finite modes? Either the potentiality for such development is given in the infinite ground or substance or it is not; if it is, then the substance is not a unity but a latent plurality; if it is not, then we must derive diversity and finiteness from some other source, in which case the universal substance is no longer universal. The question then that I wish to ask is: Does the Monism of the English Idealists really succeed in escaping from this dilemma? Let us apply the same argument as before.

Plurality and diversity certainly appear to exist; this appearance is either real or illusory. Let us suppose first that it is real; diversity and plurality then are real; they are, therefore, features of reality, that is of the Absolute. The Absolute, therefore, has parts into which it can temporarily, perhaps, and for special purposes, divide itself. How does this process of division take place? Clearly not as the result of influences exerted from outside, since beyond the Absolute there is nothing. The Absolute must then be qualified initially with a tendency to self-division. But this is tantamount to asserting that all the diversity and multiplicity which subsequently appear exist in an incapsulated form in reality itself. The fact that the plurality may be regarded as latent in the real and not explicit does not affect the issue. The least we can say is that reality necessarily reveals itself as 'patient' of all the splits and resultant pluralities that are met with in experience. What is more, this 'patience' is not a 'patience' of any kind of split resulting in any kind of development, but of just that particular split resulting in just that particular development which is the plurality we find, and not some other plurality. You cannot, therefore, avoid locating the seeds of differentiation, and of differentiation of a particular sort, and not of any other sort, in the real *ab initio*, with the result that the real stands revealed not as a homogeneous unity, but as a unity infected through and through with the potentiality for plurality. Plurality is, therefore, an essential feature of the real.

Monists have sought to meet this difficulty by denying that the plurality of diverse units which certainly appears to exist is in fact what it appears to be. Reality being a true infinite is, they assert, 'represented as a whole in each of its revelations and does not move from its character of totality to enter into them'.[1] Thus each apparently distinct entity which is encountered in experience is

[1] Bosanquet, *The Meeting of Extremes in Contemporary Philosophy*, p. 113.

not, as it appears to be, a fragmentary unit existing in isolation, it is not even an aspect of the whole, if by this we mean that one aspect of the whole is present in some sense in which another aspect is absent; it is the whole itself, which is *wholly* present in each case of the aspects in which it appears to us.

It follows that the appearance of difference which any two apparently distinct entities present is illusory; each entity is in fact the whole. Entities are not, therefore, separate, but are continuous one with another, being in fact the same thing, namely the whole, seen from different points of view. This illusory appearance of diversity of feature which the world of experience presents is attributed, and necessarily attributed, to the character of the vision which we bring to bear upon it. Our own thought is finite, limited, and partial, and the view which it takes of reality bears the stamp of its origin. It is only to a mind which is not finite but infinite that the whole can appear as it is, one through and through, absorbing within itself and transcending all the differences which trouble the partial view; it is only to the whole itself that the whole can appear whole. To anything short of the whole, to a fragment of the whole isolated in its own thinking from the intellectual structure which stretches beyond it, it must appear bounded and finite, infected with the partiality of the point of view which finds it so. But since the limited mind which sees the world as a plurality is itself separated in appearance only from the universal structure of thought, the view which it takes of reality fails to be a real view, fails, that is, to reveal reality as it is. It is, therefore, an erroneous view, and it is the task of philosophy to piece together the disconnected fragments which appear to the unreflecting vision of common sense, by exhibiting the underlying interrelations which link them to one another and to the whole.

Let us take this argument at its face-value. Our thought about reality is, it seems, of necessity erroneous, since it is the thought not of the whole of reality itself but of partial and finite beings. To what extent this conclusion invalidates the monistic theory of reality, itself presumably a product of partial and finite thought, is a question into which we cannot enter here. It has been explored by writers like Mr. Bertrand Russell in criticizing the coherence theory of truth, which it cannot but convict, if logically pressed, of being itself untrue.

Waiving this point we will proceed upon the assumption that the common sense view of reality as a plurality is an illusion. How then are this illusion and the partiality of the vision which gives rise to it to be explained on the basis of the monistic theory of

reality? The real, it is true, is no longer saddled with the responsibility for generating diversity; but it only evades this responsibility at the cost of being called to account for the generation of error.

That we think of reality as many and diverse is undeniable; but, according to the view we are considering, in so doing we fall victims to error. This error is either real or apparent in the sense in which to be apparent is to be not fully real. If it is apparent only, then it is not really but only apparently erroneous to think of reality as many, and reality *is* many. If it is real, whence does it arise? The Absolute is not only a unified whole; it is also a thought structure; under this aspect it is spoken of in terms of knowledge, being cited, for example, as the supreme example of self-conscious knowledge. Hence one of its characteristics is the characteristic of all knowledge that *is* knowledge, namely that of being true; in the Absolute alone perfect truth and perfect reality are one and the same.

Yet if the monistic account of apparent plurality is to be accepted it seems that error also is real. Error, then, is part of the Absolute. There is, of course, no logical objection to the view that reality is a unity which is all error, but this view is not, so far as I am aware, entertained by any philosopher. But if reality is not all error, then it is something else besides error, since, as we have seen, the error which represents it as a plurality is real, and therefore part of reality. In any event the seeds of error are implanted in reality itself, which instead of being a homogeneous unity throughout is qualified *ab initio* by the potentiality for the development of error, not of abstract error which may result in any kind of illusion, but of that particular kind of error which results in our taking the particular view of reality which represents it to us not as abstract plurality, but as just this sort of plurality and not that.

But it is no more possible to account for the emergence of error out of a real which is perfect truth than of plurality out of a real which is perfect unity.

The conclusion is that a reality which is an unqualified unity cannot be made the ground of a plurality which is qualified by specific characteristics, whether or not we interpret these characteristics in terms of real differences or of real errors which create the fictitious appearance of differences. Reality, therefore, is not a unity; it is qualified either by plurality or by error from the beginning. As we have seen reason for rejecting the arguments from relations and from wholes and parts upon which the objection to the plural view of reality is partly grounded, we may reject the possibility that error is one of the initial characteristics of the real,

and accept the other alternative which declares reality to be initially a plurality.

(B) *Vitalistic Monism. The universe as change.* We have now to turn to a type of Monism which more closely concerns our present purpose. To this type belong all theories which assert the fundamental character of the real to be homogeneous change or flux, which may be further characterized, as it was by Schopenhauer, as a perpetually evolving Will.

Most of the philosophies of this type are of comparatively recent origin; the assertion of an ever-changing flux as the basis of the real is indeed the outstanding feature of modern philosophy. It is the fundamental presupposition of the thinking of William James and the Pragmatists; it is the reality of Bergson; it is, under a somewhat different guise, the 'thing in itself' of Schopenhauer; and under yet another aspect it does duty as the real for Croce and Gentile.

On the relationship between philosophical systems and the instinctive needs of the human spirit we have already made some general observations at the beginning of the chapter. In particular we tried to assess the bearing upon the validity of a philosophy of its ability to satisfy human wishes. The connexion between a fluid universe and certain features of the modern spirit is, however, particularly close and merits a few words of special treatment. The keynote of the nineteenth and early twentieth centuries was a victorious humanism which, finding its extreme expression in the anti-metaphysical Positivism of Auguste Comte, sought to eliminate from the realm of philosophy, if not from the universe itself, everything that was alien to human interests. The destinies of the human race became the central object of philosophical thought, and any suggestion of a transcendence or other-worldiness uninfluenced by human minds and indifferent to human interests was dismissed as treachery to the triumphant march of the human spirit. Even religion itself was divested of the taint of the supernatural, and identified with the belief in the glorious future of mankind. The Kingdom of Heaven, in fact, became indistinguishable from the social Utopia. Our duty to mankind lies, it was said, in this world here and now, to make it better and in the long run to make it perfect. As for our duty to God that will be realized automatically in the performance of our duty to man, if indeed Godhead does not itself turn out to be nothing more nor less than man's perfectibility. Thus philosophy became the noble art of self-preservation.

It is this belief in human power and human importance that is

the inspiration of Pragmatism. The mechanical advances of the nineteenth century have led to the view that by human energy and effort all obstacles may be overcome; the world is ours to make as we will, and it seems not unreasonable to hope that the activity which has harnessed the forces of nature and set its seal upon the material universe will find the universe revealed by thought equally amenable to its influence. If it is not so, it can be convicted of unreality and replaced by another which in acknowledging its human origin declares itself malleable by human desires. Thus, if the universe is found not to be in accordance with our desires it can with a sufficient expenditure of intellectual energy be made so; from which it is but a step to the conclusion that the circumstance of not being in accordance with our desires constitutes in itself a sufficient criterion of unreality. To this attitude of mind, a thing which is real whether we know it or not is as repugnant as an idea which is true whether we like it or not, and in declaring it repugnant we manage unobserved to introduce the implication that what is repugnant to us is so at its own peril and not at ours. Hence arises a disbelief in 'hard facts', and an unwillingness to accept a world which we do not know or have not made.

The attitude of the Neo-Idealists is similar. What they refuse at all costs to admit is the existence in the universe of anything that mind has not created, or rather is not now creating. Nothing enters into their world which is not produced in coherence with everything else by the pure act of creative thinking; nothing which exists outside the process of thinking is real; and this thinking which creates reality is the thinking of ourselves, of human beings existing here and now as a group in social unity in the twentieth century. This rigorous exclusion from the universe of the transcendent extends also to the pre-existent. There is no such thing as a past event, something that, whether we like it or not, has been and cannot, therefore, be altered by present thinking. The past and present are all of one tissue, and the reality of our thinking experience not only constitutes the present but constitutes also such outgrowths from it, such filaments and projections of its present nature as are normally taken to be the past. The past, then, is only real as part of the present; if, that is to say, as part of our present thinking, it is implied and understood in the present. We are ourselves the 'far-off divine event to which the whole creation moved'. So insistent is Croce in the ruthless elimination from reality of all that does not enter into our present experience here and now, that he is prepared to deny to philosophy the performance of her traditional function of solving, or of attempting to solve the

riddle of the universe by apprehending the nature of ultimate reality. And philosophy cannot perform this function for the simple reason that there is, in Croce's words, no 'noumenal world, taken as beyond the phenomenal world in which we pass our ordinary life, and in which our historical research is occupied'.[1] The origin of the belief in such a world is 'religious or mythological', and has regrettably persisted even in the philosophers who have most effectively directed thought towards the human and the earthly as the exclusive reality. It is nineteenth-century Positivism which Croce has in mind here, and he proceeds to take credit to Neo-Idealism for freeing philosophy from the last traces of Positivistic flirtings with mythology, while continuing to fight Comte's battles against a trans-human world. Examples of this same tendency to limit reality to the human and earthly could be multiplied almost indefinitely from modern thought. It appears not only in Pragmatism and in Neo-Idealism, but in the philosophies of Bergson and Vahinger, while in modern psychology it is all-pervasive; and in almost every case it is found to be allied with a view of reality as an unindividuated ever-changing flux.

What is the reason for this connexion between a humanistic attitude to knowledge and a Heracleitean conception of reality? It is not far to seek. The typical modern thinker denies, when he can, all reality that does not bear upon it the impress of the species to which he belongs. When he is constrained to admit some substratum of raw material upon which the constructive faculties of the human mind can as it were 'bite', he regards it as essential that it should offer as few obstructions to the free play of the human spirit as possible; in other words it must be featureless. On this assumption, and on this assumption alone, all the characteristics and distinctions which are subsequently discerned in it may be attributed to the prolific workings of the human mind, whose ability to bring reality under the domination of the human will is thus triumphantly vindicated even when it is reluctantly forced to disavow the creation of the raw material which it dominates. Now the most featureless kind of real which we can imagine is an ever-changing flux; without stability or solidity, without mark or distinction of any kind, it declares itself at once malleable and receptive; it is pure surface, and as such offers a clean slate for the writings of the human spirit. Above all it contains nothing non-human and eternal which is there, whether we like it or not, to be accepted, to be worshipped even, but not to be manipulated by the supple imaginings of the philosopher's mind.

[1] *Teoria e Storia della Storiografia*, p. 137.

And so we are presented with this spate of universes in flux because they are expressly bowdlerised to begin with of all non-human features which might thwart and humiliate the all-conquering mind of twentieth-century man. Monistic these universes are, since their reality, when they admit a non-human reality at all, is homogeneous through and through, but it is a reality which is a pale shadow of itself, devoid both of substance and content, a mere tenuous wraith for the shaping of the human mind. Does such a conception stand the test of analysis more successfully than the richer and more imposing real of the English Idealists?

Examination of view of reality as constant change. For William James the initial stuff of reality is a 'continuum', which is at once experience and the stuff which is experienced. The stuff of reality is neutral as between mind and its objects, appearing as mental or as material according to the connexion or context in which it is taken. In opposition to the atomistic psychology of Locke and Hume, a psychology which regarded experience as composed of distinct sensations between which the mind interposed connexions, William James emphasized the fact that the relations between things were given in experience just as directly as the things related; they were not, however, given *as* relations, but were embedded in the continuous stream or flux, which the mind discriminates into relations and the objects they relate. The flux itself is conceived as featureless; this at least I take to be the implication of the famous Jamesian description of it as 'a blooming, buzzing confusion'. It is a blurred whole, which has to be articulated and made precise for the purposes of living. Such features as it possesses are, to use one of James's expressions, carved out of it by the activity of mind. A world of experience unmodified by the articulating activity of mind, a world which was a vast indeterminate flow would offer difficulties for action; therefore the mind, which is essentially a practical activity, breaks up the living movement of the real by inserting stops or gaps in the initial confusion. Concepts are the instruments by means of which the mind achieves this articulation of the real; they are the ideal dissections of the perpetual flux, and they are employed in and reflect the interests of the experiencing subject. Mind in analysing and breaking up the given flux of experience is not only active; it is active along certain special lines. It eliminates and selects, it selects and amplifies in the interests of the perceiver and in relation to the purposes he has in view. Thus, all experience is a form of choice, the objects we perceive being dependent upon and conditioned by will. While reality as it is initially given to experience is a featureless continuum, the reality we know is a reality we

ourselves have made; it reflects our temperaments and serves our purposes, just because it is in the long run the offspring of our wills. Thus, out of a reality, monistically conceived, though after a different pattern from the Absolute against which William James waged such uncompromising war, we get a plurality created by the activity of mind.

This view of reality has been elaborated and reinforced by Dr. Schiller. While not altogether denying a certain brute substance of reality which is the subject-matter of perpetual vivisection by the mind of the perceiver Dr. Schiller is not easily to be drawn to speak of its nature. It is for him something shadowy and remote; what interests him is the reality we know, and this reality, he asserts, has been 'faked' for our convenience by the mere circumstance of our perceiving it. All knowing is for Dr. Schiller relative to doing. What determines, therefore, whether a fact gets known is the suitability or non-suitability of the fact for the purposes of action. We do not bite off more reality than we can chew. The test of suitability for the purposes of action turns out, moreover, to be the criterion of reality. The argument here is as follows: knowing is preliminary to acting upon our knowledge; therefore the perception of a fact which necessarily carries with it belief in the fact's existence alters the fact perceived. If the belief alters the fact in accordance with our wishes, then the belief is one that serves our purposes, and is, therefore, in accordance with the pragmatic theory of truth, true. Since the belief in the fact is true the fact is real. Thus, reality, like truth, is in continual process of manufacture, the essential factors in the creation of truth and reality alike being the ability of the belief entertained and of the fact whose existence is asserted by the belief, to satisfy the wishes which led to the formation of the belief.

The point that I wish for our present purpose to bring out is that this process, which amounts to nothing less than the manufacture of truth and reality (as it is known) by the human mind, depends upon and indeed is only rendered possible by a monistic conception of reality as it is apart from knowledge, as a formless featureless flux, as void of distinction as a sheet of white paper. Can this conception be sustained?

If reality is in fact formless and featureless, it is certainly surprising that I should carve out of it certain objects, especially when they are displeasing ones, rather than others. It is even stranger that other minds placed in the same situation should insist on carving out precisely the same displeasing objects. This perception of similar worlds, which is explicable on pragmatist assumptions

if the interests of two persons are the same, seems inexplicable when their interests are different. If X tosses up a coin to decide an issue, and Y calls 'heads', it is to the interest of X that it should come down tails and of Y that it should come down heads. Yet if it does come down tails, the fact that it is tails is admitted as much by Y as by X. Y, then, would seem to have carved out of the flux of reality a fact which thwarts instead of serving his purposes. If, therefore, Dr. Schiller's theory of reality be correct, Y should refrain from calling the fact real. Yet we all ruefully admit the existence of realities that displease us, thwart our wishes, give us pain, and are generally disadvantageous, and the common sense instinct that relegates a condition of affairs in which everything furthers our wishes to the world of dreams or the state of Paradise is undoubtedly a sound one.

Suppose, however, in the teeth of this instinct and of the evidence on which it is based, we insist on the full rigour of the pragmatist doctrine, and steadfastly maintain that we only select from the flux of reality those facts which serve our purposes, then we must regard facts which displease us as illusory; they are, that is to say, appearances only.

This conclusion has two disadvantages; first, it brings us back to the time-honoured distinction between appearance and reality, which Pragmatists and Vitalists generally are never tired of condemning; secondly, facts which are illusory must be false appearances of something other than themselves which is real. We are driven then to postulate a reality which is other than a featureless flux, since it possesses the characteristic of being different from its illusory appearances; it is in fact in virtue of this difference that the appearances are convicted of being illusory. It is, moreover, a reality which we do not know and have not made; but, if we do not know it, we cannot know that it is different from the illusory appearances; while, if we admit that we have not made it, we find that we are committed to asserting the precise contrary of the pragmatist position, since it turns out that the reality that we have made, that is the illusory appearance, is unpleasant, while the reality that we have not made being different from the appearance is pleasant.

It seems then that we cannot, without falling into serious contradiction, rest in the position that reality is a featureless flux from which we carve out the objects which serve our interests. And so we are driven to the alternative view that reality is not completely featureless nor wholly without differentiation, but contains within itself and of its own right certain rudimentary distinctions which form

the basis upon which mind builds the structure of the world known to science and to common sense. And this, it will be said, is all that William James wished to contend; he never, that is to say, maintained that reality was really indeterminate but only that the distinctions in the given were latent and embryonic in character, and that the human mind was responsible for the fully-developed form which they ultimately assumed in experience. It may be so, but Pragmatists often write, and William James often wrote, as if it were not so, and they and he only grudgingly admit that it must be so when faced with the difficulties of the extreme voluntarist position, which asserts the unfettered creation of the world of experience by the human mind.

Their reluctance in the matter is readily intelligible, for once it is admitted that reality contains differentiations within itself, that it is not a homogeneous flux but a heterogeneous plurality, then their whole position falls to the ground. Suppose that we admit that rudimentary marks and distinctions are initially given in reality, and that it is the function of the mind by selection, emphasis, and amplification to work up these embryonic articulations of the real into the fully-developed world of objects with which common sense is acquainted. It will follow from our admission that perception consists in recognizing and working up distinctions that are already there, not in introducing into reality distinctions which are imposed upon it from without. Our selection of facts, therefore, is neither arbitrary nor voluntary, since we are constrained by the limitations of what we find. We cannot make the best of all possible worlds at will; we can only make the best of the world that thwarts our will. As for reality, it is no longer a homogeneous flux; it contains within itself the shapes of certain objects and not of others, of objects too which are given in one particular juxtaposition or form of arrangement and not in another. But a reality which harbours, albeit in an undeveloped form, all the distinctions which are subsequently worked up into a world of objects is a plurality qualified and characterized by features as marked and as unyielding as the world of everyday life. In no sense do we make this reality at will to please ourselves; we find it whether we will or no, and find it too often to our cost.

A similar criticism may be levelled against the conception of reality which Vahinger has elaborated in his remarkable book, *As If*. Here again the real in itself, that is the real as it is independently of knowledge and imagination, is unknown and, what is more, unknowable. We may picture it, however, as a Heracleitean flux of happenings, owning no resemblance to the world of everyday life.

Upon this inert and helpless flux of reality the mind gets to work, thinking being a process whereby we obtain imaginary standpoints and boundaries from which to get control of the flux of reality. These standpoints are, or are the result of, the fundamental categories according to which our imagination works, and they result in a view of reality which is amenable to our wishes and is comprehensible to our thought. Yet such a view is necessarily a fiction, and the reality which it reveals is essentially one of our own making. God, the Soul, Immortality, the Moral World-Order, these are examples of the fictions which result from the application of human thinking to the flux of reality. The conception of the atom and the laws of science are only fictions of a different order, designed to serve a different purpose and to fulfil a different need. Hence the attempt to understand the universe by means of philosophy is doomed to failure; human thinking is disabled by its own imaginative processes from comprehending the universe, since, when it makes the attempt, all that it succeeds in doing is to comprehend its own fictions. Even the puzzles and antinomies with which philosophers have concerned themselves are merely the creations of their own thinking. Hence for Vahinger as for Croce there is no riddle of the universe, nor, it may be added, is there a task for philosophy.

Here, again, we have a reality monistically conceived as a featureless flux, in order that all the wealth and variety of the world we know may be attributed to the imaginative capacity of the human mind. But, we are entitled to ask, is it really a fact that the fictions which are what the mind studies when it endeavours to reach reality are exclusively the products of our own imagination? Thinking, for Vahinger, is the kind of fiction that helps us to live. This being so it would appear that we should be able to think whatever thoughts we please. It may well be that we do; but, it must be remembered that for a philosophy such as that of Vahinger, thinking is not merely a process of discovering reality; it is creative of reality since the real that we know is the product of the fictions we create. The ability to think the thoughts we please is, therefore, on this view, tantamount to the ability to make the reality we please. But if reality can be created at our pleasure why do we fail to create a reality that pleases? If it be really true that the fictive power of the imagination is the source of all that we know, then there ought to be no difference between imagining and knowing. Yet while it is true that we can fancy what we please, we know what we cannot help knowing.

It seems, then, that the objects with which we are brought face

to face in knowledge, whether they be objects of sense, scientific laws, or moral and theological conceptions, are not merely the products of our will but spring, at least in part, from some source which is independent of our will. That source can only be reality itself, reality that is to say which is not constructed by thought, but is independent of thought and discovered by it as independent.

Once again then we are compelled to locate the variety and diversity of the world revealed to knowledge not in the constructive power of human will and imagination, but in reality itself. Reality, therefore, is initially qualified by all the marks and distinctions which form the basis of the world of experience; it is not featureless and therefore monistic, but individuated and therefore pluralistic.

A similar conclusion emerges from a consideration of the attempt to present reality as a monistic flux with which Bergson has familiarized us. Here, once again, the question that we must insist on asking is, by what right the flux of reality is credited with the capacity to generate the apparent diversities and solidities of the world of appearance. Bergson's reality, it must be remembered, is a perfectly continuous flow or stream. It is a pure becoming without marks or features of any kind. Whence then does the world of solid objects extended in space arise? Bergson gives two answers to this question, which are partly consistent and partly inconsistent.[1] The first is that it is formed by the manipulative operations of the intellect which in the interests of practical action makes cuts across the living flow, and hypostatises it into solid objects and their relations; the second, that the world of everyday life in so far as it presents us with the feature known as matter, in which the distinction between appearance and reality is most clearly manifest, is or is due to a reverse movement of the flow of reality, caused by an interruption or falling back of the flow. Let us consider each of these answers separately.

The view that the plurality of static objects is due to the 'cutting up' operations of the intellect is exposed to the same objection as that which we advanced against the evocation of the plurality of experience from William James' continuum. If reality is quite featureless, the view of reality with which the intellect presents us

[1] I say that these two answers are partly consistent because Bergson usually, although not always, seems to think of the intellect as making cuts not across the forward movement which is life, but across the reverse movement which is due to the checking of life. This at least I take to be the meaning of such phrases as, our 'forward movement' apprehends the 'backward movement' or the world of inorganic matter. Hence, while matter is the reverse movement of reality, the plurality of material objects is the product of the intellect's activity directed upon the reverse movement.

must, in spite of Bergson's disclaimer, be quite arbitrary. When on Bergson's view my intellect carves out of reality a table and a chair for the purposes of my action, it might just as reasonably, so far as the nature of reality is concerned, carve out a rhinoceros and an elephant: it only presents me with the chair and the table because they are more convenient for my purposes. But as a matter of fact the intellect is very far from carving out of reality the sort of objects and events we should naturally choose. If *A* desires to elope with the daughter of *B*, and the only way of effecting his escape consists in catching the 8.15 from Charing Cross, it serves the purposes of *A* that the 8.15 should leave to time, just as clearly as it does not serve the purposes of the pursuing *B*. Yet both *A* and *B* agree to carve out of reality the same 8.15 leaving at the same moment. And in what sense do missed trains and sprained ankles assist our purposes? It would seem, then, that the objects we carve from the flux of reality are not purely arbitrary intellectual constructions, but do correspond to some rudimentary distinctions existing in the real which are not the work of the intellect. There are, as it were, planes in reality itself along which the cuts of the intellect necessarily proceed.

Nor can we subscribe to the view of the intellect as a purely practical quality, upon which Bergson's indictment of a pluralistic reality as owning no metaphysical foundation rests. If reality does not contain within itself the distinctive marks and features which common sense experience finds in it, then these marks or features must be imposed on it or inserted in it by the intellect. The intellect, therefore, presents us with a false view of reality. 'Becoming', says Bergson, 'is what our intellect and senses would show us of matter, if they could obtain a direct and disinterested view of it';[1] and we are explicitly warned against supposing that it can give us metaphysical truth:—'But when in speculating on the nature of the real we go on regarding it as our practical interest requires us to, we become unable to perceive the true evolution, the radical becoming.'[2]

A philosophy which begins to look askance at intellect soon finds itself on dangerous ground: for the despised intellect is the tool with which the philosophy is constructed, the weapon with which it asserts its claim. The Greeks pointed out long ago—and it should by this time have become a philosophical commonplace—that you cannot know that intellectual knowledge is unattainable, for your knowledge that intellectual knowledge is unattainable is itself a piece of intellectual knowledge. If, then, intellectual knowledge is really unattainable, the intellectual knowledge

[1] Bergson, *Creative Evolution*, p. 287. [2] Ibid., pp. 287–8.

which asserts its unattainability is itself unattainable; so that we cannot know that intellectual knowledge is necessarily unattainable. The existence of knowledge is in fact affirmed in the very act of its denial.

It has been frequently urged against Bergson that his philosophy, in denying that the intellect can give us truth about the universe, exposes itself to the danger which the Greeks were the first to point out. For his denial that intellect can give us truth about the nature of the universe is in itself an intellectual affirmation about the universe, an affirmation to the effect that the universe is such that the intellect does not give us truth about it. And if we examine the structure of Bergson's philosophy we cannot avoid the conclusion that it is an intellectual achievement of the very highest order. It employs the most subtle dialectic, the most ingenious similes, the most persuasive arguments, all of which proceed from Bergson's intellect and are addressed to ours, to prove that the view which the intellect takes of reality is a false one. But if this is so, then Bergson's philosophy, which is assuredly an intellectual view of reality, is a false philosophy; so that it turns out not to be true that the intellectual view of reality is false. In proportion as Bergson discredits intellect he discredits his own arguments: in proportion as he proves his point he disproves his philosophy.

Now let us turn to Bergson's conception of matter, which is in a sense an alternative conception, as a reversal of the vital flow, due to an interruption of the flow. It is, I think, clear that there can be no interruption without something that interrupts. What, then, is the something that interrupts? It cannot be the flow, because the flow could only interrupt itself in virtue of some diversion within itself, and this diversion would then be the interruption which it is invoked to explain; nor can it be matter, since matter proceeds from the interruption and is not, therefore, the interruption which causes matter. We are driven, then, to suppose that the real must contain the seeds of division in itself; that, instead of being a featureless becoming, it is variegated and articulated; that, instead of being pure change, it contains elements other than change, which are able to interrupt the change.

If it were not so, we may well ask how the appearance of diversity and solidity that matter undoubtedly presents can be explained. The answer that the appearance is an illusion due to the operations of the intellect will not satisfy us; for, even if we assume that shape and form, solidity and diversity are illusions, we have still to ask whether the fact of the illusion itself does not point to some flaw in the structure of the real. We are here driven

to emphasize again a point we have already made. It is as difficult to explain how error and illusion can be generated from pure unindividuated reality, as to account for the fact of diversity and solidity in a universe which is one throughout and change throughout. Bergson, in effect, says 'reality only appears to consist of solid objects in space because we cannot help thinking of it in that way'. But the question then becomes, how did we come to think of it in that way? And the only conceivable answer is that, if reality is not composed of matter extended in space but is pure becoming, then reality must be made to account for our error in thinking it is not pure becoming; reality therefore contains the seeds of error in itself: reality therefore is not a pure unity, but an initial plurality.

But if, to take the other horn of the dilemma, matter is *not* an illusion, but is part of the nature of the real, if, in other words, we are to accept Bergson's own account of it as spent becoming, then reality evinces two separate tendencies, that of becoming and that of becoming *spent*, which are respectively life and matter. These cannot both be expressions of the same homogeneous thing; therefore reality is not one but two.

Once again then we find ourselves unable to account for plurality or for the appearance of plurality on the assumption that reality consists exclusively of a changing vital flow. A further conclusion moreover begins for the first time to emerge; if we accept the conception of a dynamic changing flow as part of the real, and if, for the reasons that we have given, we are unable to identify it with the whole of reality, then, some part of the reality which is other than the vital flow must be envisaged as a principle which obstructs or interrupts its passage. It is only on this assumption that we can account for the splitting up of the flow of reality, not only into the multitudinous diversity of the world of objects, but into the plurality of individual living organisms. So far as the world of inanimate objects (if indeed any object is completely inanimate—see Chapter IV, p. 148) is concerned, I can myself see no reason for regarding it as an aspect or expression of the living flow. Once it is admitted that there is in the universe something static and inert, a brute given, which the vital flow finds, against which, perhaps, it struggles, but which it does not itself generate, then this principle of inertness seems to be sufficient to account for the presence of all the physical constituents of the universe which are not living.

But when we come to the plurality of living individuals, each of whom is obviously in some sense an expression of the dynamic

changing principle of life, how are we to explain the fact that they are a plurality and not a unified and unbroken stream of life, unless we are to grant that what is living and changing in the universe is breached and broken up by something other than itself? This point, which for my view is of fundamental importance, may be illustrated by a reference to Schopenhauer's Will, a conception which presents many features in common with the view of Vitalism that I propose to elaborate in succeeding chapters. For Schopenhauer the fundamental nature of Reality is that of a changing, dynamic, unconscious Will. This Will is literally all-including; there is nothing else beside it. It is driven (presumably by the necessities of its own being) to objectify itself in various manifestations. All the variety and multiplicity of the world of existence, from chairs and tables to living beings, and from living beings to the objects of aesthetic contemplation, are different forms of its objectivation. The differences between them are as unreal as their appearance as separate and isolated entities; on a closer view they will be seen to be merely phenomenal expressions of an underlying unity. But if the unity is really a unity, how comes it to develop the differences which the expression of itself in various forms implies? Even if the apparent multiplicity be *merely* phenomenal, the potentiality for its development must have qualified the initial unity, just as the potentiality for development into a chicken is a characteristic of the egg. Nor can we stop at the potentiality for developed difference. The Will does not merely objectify itself; it objectifies itself in certain ways and not in others. We must start, therefore, not merely with a bare Will, but with a Will initially qualified by the capacity for developing either particular kinds of differences, namely, those which actually appear to exist in the world we know, or—for it comes to the same thing—the illusion of particular kinds of differences. But what does this mean, if it does not mean that the unity is not a unity at all; that there already exist in an incapsulated form within it all the diverse and finite individualities which it subsequently generates, and that it is not, therefore, one thing but many things?

From whatever point of view we regard a reality monistically conceived, it seems impossible to account for a world of pluralistic appearances. For—and this is the question which in various forms we have been asking throughout the chapter—can a reality so conceived split itself up in such a way as to permit of the development of difference? Vitalists are accustomed to think of reality as a broad, flowing river, scattering and dispersing itself for certain special purposes into an infinite number of minute streams. Now,

if there exists something which is not the river, but which interrupts the river, such dispersion can be readily understood. Rivers divide when they meet obstacles which split them as it were *ab extra*. But neither Bergson nor Schopenhauer can have recourse to this conception. For them the universe *is* the river; and there is, therefore, nothing to perform the work of division *ab extra*. There remains, therefore, no alternative but the conception of a river dividing itself as it were *ab intra*. But in that event it can no longer be a true unity; its reality is a qualified unity which initially contains the seeds of division and plurality.

A further consideration pointing inevitably in the direction of a duality is one which I have already raised in a somewhat different form in my criticism of Theological Monism. Even if we were to admit that God possessed the power to generate pain and evil and imperfection out of his own all-embracing goodness, how, I asked, can we conceive the object of his so doing? Whatever the success of the earthly experiment, the very perfection of its beginning in God precludes the possibility of our regarding its end as an improvement. Admitting then the conceivability of the creation of pain and evil, I could not, I confessed, understand its purpose. The view of reality conceived monistically as a vital flow raises a similar difficulty. Admitting that it could generate diversity and plurality, or the erroneous appearance of diversity and plurality, out of the nature of its unity, why should it be moved to do so? Why, for example, should Schopenhauer's Will take the trouble to objectify itself? Why should Bergson's *élan vital* be at pains to evolve the intellect? If the universe is in the last resort nothing but a homogeneous flow the whole process of evolution seems motiveless. The vital flow, we are told, objectifies and manifests itself in temporary individuals, which will in due course be re-absorbed into the all-including stream from which they sprang. But this ultimate absorption into the vital flow of all the variety and imperfection of the universe would be merely a reconstruction of the state of affairs which existed before the objectification took place. If, then, the end of the evolutionary process is identical with the beginning, if unity splits itself into diversity merely in order that it may again achieve unity, the universe is either a meaningless joke or a vicious circle.

For this reason, if for no other, we seem driven to postulate the existence of some principle of opposition to the Will, to condition its objectification and to account for the world of apparently plural reals. It is only on this assumption that we can guarantee the integrity not only of plurality but of individuality itself. If reality is

homogeneous change, or if Schopenhauer's Will is a continuous and indivisible unity, then the particular representations of the Will which are individual living organisms are in some sense a falsification of its real character. This conclusion has the effect of destroying the basis of individuality by stigmatizing it as a temporary and even illusory appearance, in some sense in which universality, namely the universality of the Will, is fundamental and real. It is also open to the charge that having first pronounced individuality to be a representation of the real and attributed such being as individuals possess to the presence in them of the real, it proceeds to convict them in respect of their individuality of an essential falling away from reality. Yet reality cannot be the innermost cause of the being of that which is fundamentally different from or of a lower order than reality.

I mention these points in passing as indicative of the difficulty of accepting Schopenhauer's account of the emergence of individuality upon the basis of a universal homogeneous Will. I shall endeavour in a later chapter to give an account of the relationship between the individual and the force or spirit of which the individual is an expression in terms which preserve the integrity and freedom of the individual. (See Chapter IV, pp. 203–6.)

Before leaving the metaphysical systems of Bergson and Schopenhauer I am anxious to guard against a possible misapprehension. Because I cannot see my way to accept their view of reality *in toto* I do not repudiate the notion of perpetual change or flux. This is indeed, on my view, a fundamental factor in the universe; and it seems to me to be possible, as in a later chapter I shall try to show,[1] so to regard it without necessarily identifying it with the whole universe. The principle of change is a factor in the real, but there are other factors equally real which lie beyond it and are not affected by it.

So far as the world of the spirit is concerned, and by 'the world of the spirit' I mean life itself, as distinct from the objects upon which the awareness of life is directed (see Chapter III) and with which it interacts (see Chapter IV), I affirm with Bergson and for Bergson's reasons that it is perpetual change. Life or spirit is in other words an historical becoming; but the process of its becoming does not constitute its own justification and *raison d'être*, nor, I may add, is this process the fundamental fact about reality. If I were compelled to say that reality was like this or like that (a notion which my pluralistic conception of reality as being or being like a number of different things requires me to disavow) the process of historical

[1] See Chap VIII, pp. 339–44.

becoming would not be the model upon which I should envisage its universal nature. For, in my view, the process, in superseding itself, reaches out continually to something beyond itself, a something which is outside and, therefore, unaffected by the perpetual movement of the spirit towards it. This conception, which is one that a purely monistic view of the real is bound to repudiate, will be developed in the final chapter of this book.

Before closing this chapter, however, I should like to establish the necessity for such a conception by exhibiting the difficulties in which a further system, which is at once vitalistic and monistic, becomes involved by its express repudiation of a reality beyond process. My brief discussion of the metaphysics of William James, of Bergson, and of Schopenhauer, has served to demonstrate the need for a principle of obstruction or interruption in the universe, to diversify and break up the initial unity of life. Without such a principle, I affirmed, plurality whether as a fact or an appearance is inexplicable. It is, however, to the philosophy of Croce that we must turn to convince ourselves of the need for a yet further infringement of the monistic real. Just as we cannot explain the phenomena of existence without a principle to obstruct and impede the process of life, so are we driven to assert yet a further principle or factor in reality to serve as the goal or end of that process. The philosophy of Neo-Idealism raises this issue in an acute form, although it is by warning rather than by example that it demonstrates the necessity of which I spoke.

That Croce's system is exposed to the objections which I have already brought against other vitalistic systems which are also monistic, that it reveals itself in other words as infected, whether its author will or no, with the taint of the very pluralism it disavows, it is not difficult to show. Nor, even at the risk of seeming to labour the point, can I omit to notice in passing one more example of the failure of a would-be monistic system to achieve and to maintain the homogeneous real which it pursues. Croce, indeed, differs from some of the thinkers whose work I have been considering in denying that any reality is *given* to experience even in the form of a featureless continuum. Reality, it is true, is a constantly changing flux, but the flux is not external to our thinking, a presented subject-matter upon which the mind operates; it is the very stuff of our thinking. For William James the flux of the universe is the continuum of experience, for Bergson it is creative time, for Croce it is the pulse of thought itself in and to which changes could occur. For each, the changes which form the succession of events are changes in the real system of the whole

universe; but by each the nature of that system is somewhat differently envisaged. For Croce it is thinking that is a changing flux, simply because there is for him nothing other than thinking. The thinking experience of the active subject alone possesses the title to be called real; anything else is real only in so far as it is a moment, grade, factor, or presupposition of experience.

Now experience does in fact exhibit (or develop) a number of such moments or grades, as for example, the grade of knowing, with its subgrades of intuition and the concept, and the grade of willing with its subgrades of ethical and economic activities. But these grades are not outside experience. They are generated in experience, which nevertheless remains a complete unity, embracing within itself both grade and object.

Thus, Croce asserts experience to be a unity, and yet requires it to develop a multiplicity. He holds that experience is active and developing, yet holds also that there is necessarily involved as an initial presupposition of experience the distinction between intuition and the concept. Yet this is perhaps to put the emphasis wrongly. Croce might urge, and in some places does urge, that the distincts are not in truth the initial presuppositions of experience, which is itself homogeneous, but are generated by it in the process of its activity. But in this event I must ask, as I asked before, by what means a fundamentally homogeneous reality can articulate itself by process of development into a diversity. Let me put once again the dilemma of which in the preceding pages I have already made use. If the forms of experience are initially given in reality, then they assume the status of static articulations, latent in the framework of the real, and devoid of the inducement or incentive to seek a more complete unity by transcending themselves. Two results follow; first, the real is not a unity but a plurality, secondly, there is no rationale for the movement of experience which is for Croce the essence of reality.

If, however, we accept the other alternative and regard the moments of experience as developed, then we can no longer hold either that they, or the potentiality of which they are an actualized expression, are given initially; what is developed is not there before the development takes place. Experience, then, is a homogeneous unity, in which event it cannot be made the ground of a fourfold multiplicity. An experience which is a unity cannot develop within itself distinctions which are as real as the unity; an experience which is articulated *ab initio* with the germs of all the characteristics which it is subsequently found to develop is not a unity but a plurality. Finally, if we attempt to write off the

appearance of difference which the distincts imply as a mere illusion springing from the limitations of partial vision, we are confronted with the difficulty previously mentioned, that a *real* unity can no more generate an *apparent* diversity than it can be made the ground of a *real* diversity.

Summary of foregoing argument.

The different criticisms which I have urged against the various forms of monism considered in this chapter are fundamentally the same criticism. It has assumed different forms because the conceptions of the real at which it has been levelled have themselves differed. But whether reality is conceived statically as an intellectual structure of thought, or dynamically as a constant flow, the objection which I have brought against the monistic conception as professing to give a representation of the *whole of reality*, of reality, in other words, pictured as a fundamental unity, remains unaffected. Briefly stated that objection is as follows.

If reality, as Hegelian philosophers assert, is a whole or unity, such that nothing short of the whole is real, and anything that impairs the unity is illusory, then you cannot generate out of it variety, error, and multiplicity. If, on the other hand, you do not make the unity responsible for the emergence of variety, error, and multiplicity, then they must exist in some form side by side with the unity, equally real with it and in a sense opposed to it. But in that event the world is not a complete unity. It must be assumed to be at least a duality, and to sustain not only the unity but some opposing principle other than the unity which causes the unity to break up and express itself in variety.

The need for a further factor. From this objection the system of Neo-Idealism is no more immune than the others considered; but Croce's metaphysic is troubled by another and no less formidable difficulty, a difficulty which to my mind effects a further breach in the monistic conception of reality by introducing yet another factor into the universe. It will be remembered that it was on account of this difficulty that I was originally led to include Neo-Idealism in my brief survey of vitalist systems.

Movement and activity are for Croce the essence of experience and therefore of reality. Yet for this activity it seems impossible to account. Monism of the Absolutist type endeavours to retain, even while it denies the ultimate validity of the apparent movement of the real, by the conception of a necessary development in mental process. This development springs from the tendency of the whole to express itself in individual manifestations and from the contradictions to which these partial expressions give rise.

It is the endeavour to transcend these contradictions which produces the movement of thought. But for the Neo-Idealist there is nothing but this movement. There is no clash of contradictions to constitute its source, and—a point which now emerges for the first time—there is no end which it seeks to achieve. The spirit is defined as 'an infinite possibility overflowing into infinite actuality', its progression springing inevitably from the dialectic of finite minds overflowing in accordance with the ultimate structure of the spirit.

Now we are expressly told that this movement of overflow which is the process of the real's activity is not a process *ad infinitum*. 'The progress *ad infinitum*', says Croce, 'never reaching its goal, is not a progress; and the idea of approximation is an illusion'.[1] We are told, then, first, that the process has no end, and secondly, that it is not a process to infinity, and with a view to resolving this apparent contradiction the conception of a goal achieved at every moment of process is invoked.

Now this repudiation both of a source and an end for the movement of reality springs from and reflects the general denial of transcendence, which I have already noted as characteristic of this philosophy. The source and the end of the movement of thinking cannot be placed outside the process of thinking itself, without introducing this distasteful notion of transcendence, for it must be remembered that it is not only transcendence of experience that the Neo-Idealist denies but transcendence of *immediate* experience. But the repudiation of transcendence in this latter sense, the rejection of anything that does not form part of my experience, here and now, amounts in fact to a denial of an objective and differentiated universe. The universe becomes, in short, a blank, unable to sustain the endless process of thinking, which springs from no source and aims at no goal. The unity of thought is indeed, so far as this particular conception goes, preserved, but at the cost of destroying the universe in which it figures; the unity of the universe is no doubt affirmed, but as there are no differentiated constituents to be united, it is never substantiated.

Applying this conclusion to the special conception by means of which Croce tries to dispense with the necessity for a transcendent goal, I point out that a goal which is automatically realized at every moment of advance is not in any true sense of the word a goal at all; it is merely a part of the process. Progress, if it is not a movement *ad infinitum*—and we are expressly told that it is not—necessarily implies a reaching out to an end which cannot at one and the same

[1] *Saggio sullo Hegel*, p. 65.

time be both an end and an integral and continuously realized part of the process of advance towards it.

Now, if Croce is right in identifying process with reality, it is clear that an end which is not itself part of the process cannot be real. Hence an end which is conceived of as a perfect and perfectly satisfying goal is on Croce's premises a negation of reality, since the attainment of perfection on the part of an activity whose reality is identified with its own process necessarily involves a ceasing to be real. If, therefore, the reality of process which is not a process *ad infinitum* is to be preserved, the notion of an end which the process seeks to attain seems to be indispensable. I would depart, therefore, from Croce in insisting that the end of the process which is life must itself lie outside that process and be independent of it. As such it cannot itself be a creation of life; it cannot even, as Professor Alexander suggests,[1] be an evolving end emerging in a fresh aspect at each level which life achieves; it must be static and immutable, possessed of a being which is unaffected by the process of life towards it. Yet this is only possible if the relation between the process of life and the end of the process is one of knowledge or contemplation. Life in short is not a coming into being of perfection, but a coming into awareness of a perfection that exists independently of it. These conceptions will be developed in the later chapters of this book.[2] For the present I do no more than emphasize their incompatibility with a monistic system of reality, under whatever guise that reality is conceived.

[1] In Space, Time, and Deity especially vol. II.
[2] See Chaps. VIII and IX.

CHAPTER III

KNOWLEDGE AS AWARENESS

INTRODUCTORY.

IN the preceding chapters I have tried to establish the existence of a principle of life, while at the same time demonstrating the impracticability of attempts to interpret the world of experience in terms of that principle alone. Assuming for the moment that the arguments by which these conclusions have been reached are trustworthy, and that we are left with a universe to which life, which obstinately refuses to resolve itself into modifications of matter, and matter which refuses equally to subside into an aspect of thought structure, both insist on belonging, we have next to consider the nature of their relationship.

This question is one of great difficulty. The problem which it raises may be briefly stated as follows. Suppose that we assume that mind and matter are really different, and that neither is interpretable in terms of the other; that each exhibits its own attributes and obeys its own laws, and that no one of these attributes can be discovered in and no one of these laws can be applied to the other. Now the attributes of matter are mass, weight, size, and shape, and the laws which it obeys are those of physics; but mind is without substance and possesses neither weight, size, nor shape. Matter, it is to be supposed, can only be influenced or affected by an agency which possesses in some degree, however small, the same attributes as itself. That which has weight cannot, it is said, be lifted by that which is weightless,[1] while even an electric spark has size, shape, and physical content. Mass can be moved by energy, and mind, it is true, is usually spoken of as possessing some kind of energy. But the energy by which matter can be moved is envisaged in material terms, and is not in the last resort distinguishable from matter itself; the energy appropriate to mind is a stream of thoughts, volitions, desires, and aspirations. If we accept this complete disparity of attributes, the question arises,

[1] It is true that that which lifts must itself be lifted by other objects possessing weight, which must in their turn be lifted by still other weight-possessing objects, and so on indefinitely. But this is merely to raise in an unfamiliar form the problem, which eternally besets all purely materialist conceptions of the universe, of finding a first cause. It is because it seems impossible to conceive how a universe without mind got going at all that I feel driven to introduce a non-material vital factor, even if this involves us in the problem of explaining its interaction with matter.

how can mind influence matter, how interact with it, how, indeed, 'come at it' at all?

So difficult are the problems raised by this question, that they are often regarded as constituting an insuperable objection to any kind of dualism. Monism has, in consequence, been as popular among scientists as among philosophers, with the difference that while scientists have sufficiently extended the conception of matter to make it comply with all the requirements of mind, philosophers have found no difficulty in accounting in terms of mind for the whole 'illusion' of matter. I am, however, in the light of the conclusions arrived at in the last chapter, pledged to retain both, and I cannot, therefore, any longer postpone the consideration of the nature of their relationship. This consideration will occupy me throughout this and the next chapter. In this chapter I shall be concerned with that form of the relationship which expresses itself in life's knowledge of matter, the term 'knowledge' being taken to include perception, memory, and imagination, as well as thought in the stricter sense of the term, and in the next with the interaction between life considered as a vital principle and the so-called 'living' matter of which our bodies are concerned.

It is not my purpose to embark upon a comprehensive disquisition on the theory of knowledge. Such a disquisition involving, as it must, not only a criticism of rival theories, but also an acknowledgement of the various influences which have gone to the moulding of my own view, would be beyond the scope of the present work, which aims at presenting a more or less comprehensive sketch of a vitalistic philosophy as applied to the universe as a whole. I propose, therefore, to enter upon this very controversial territory only so far as may be necessary for the statement and defence of that view of the knowledge relationship which the general theory of life to be put forward in later chapters appears to necessitate. I shall also indicate what appear to be the chief considerations in favour of this view. Before it can be stated it is necessary that I should assume as self-evident the truth of the following proposition. 'The knowing mind is always aware of something other than itself'; or, in other words, 'the object of knowledge is always something other than the knowing of it'.

This axiom would, I think, be accepted by most realists; in fact it lies at the basis of most realist theories of knowledge. But, though many philosophers would regard it as epistemologically self-evident, I am not clear that they would accept all the consequences which seem to me to follow from it. On the contrary,

many of those who take a realist view of the problems of sense perception nevertheless reject as impracticable the fundamental dualism between mind and matter that I am advocating, because of the alleged impossibility of interaction between two radically different entities. Yet in affirming that in sensory experience the mind knows an object other than itself, an object which for most realists is certainly not mental, they are committing themselves on epistemological grounds to the admission of a particular case of that interaction between a material and a mental entity, which they regard as metaphysically impracticable. A realist theory of sense perception seems to me, in other words, to imply both a dualism of metaphysical reals and an admission that these reals can interact. Yet this implication is rarely accepted by realists, or, if it is, little or no attempt is made to explain how the implied interaction could take place. I return from this digression to point out that since, if the proposition asserted above be true, knowledge always involves a relationship between two different things, it follows that there is no reason to suppose that the nature of what is known is *necessarily* affected by the mental act which is involved in knowing it; it is not necessary, that is to say, for it to be a mental existent, or to be in any sense or in any part of itself mental. It *may* of course be all of these things, although I hope to show later on that it *never* is, but assuming the axiom to be true, there is nothing in the nature of the knowledge relationship which *requires* that it should be.

My axiom, if it is true, appears to me to obviate the *necessity* for accepting any one of the numerous forms of Idealism. The *possibility* for an Idealistic interpretation of knowledge of course remains; that is to say, it *may* still be true that whatever we know *is* in some sense mental, but there is no longer any reason for supposing that this must be so.

What, therefore, I wish to do in the first place is to consider a number of views, each of which appears to be compatible with my axiom, and is put forward as being compatible with it, but each of which proves, nevertheless, on examination to be inconsistent with it.

I. FORMS OF REALISM.

At the outset of our inquiry we are confronted with a number of variants of the view known in the seventeenth and eighteenth centuries as Representationalism. This view may be stated baldly as follows. The individual is directly in touch with an external

world of objects. These objects impinge upon his sense organs and cause a disturbance of the nerves, which is conveyed by purely neural processes to the brain. On reaching the brain it causes a modification of the cerebral tissues. At this point the mysterious gulf between body and mind is miraculously crossed, and consciousness is said to take note of the occurrence; or, as it is sometimes put, the modification passes into consciousness. It is this conscious awareness of a cerebral modification that we call perceiving the object. For example, there are no secondary qualities in nature. Light is transmitted by vibratory waves in a materialistic ether; it is, therefore, merely the movement of material. When the light enters the eyes and falls on the retina, there is again merely movement of material; the impact on the retina affects the nerves which affect the brain, and this affection again is merely movement of material. Hence colour, light, and sound (for which the same argument holds) are not in nature; they are or are the result of the mental apprehension of certain movements in the brain. Thus if I look at a red book, the red book sends out rays of light which impinge upon my eyes; my optic chord transmits the resultant disturbance in the retina to the brain, where it causes a further disturbance which may be metaphorically described as the impression of the red book upon the brain. It is this further disturbance which is the proximate physical cause of the conscious act which is called seeing a red book. To take an analogy from the cinema, the sense organs when stimulated by external objects throw pictures of the objects upon a screen located in the dark cabinet of the brain, much as cinematographic pictures are thrown upon the lighted screen by the operator's machine, and consciousness is the light which illumines them. When the illumination takes place, there occurs the experience which is known as seeing the object.

The difficulties of this view are historically famous, and constitute the point of departure for most forms of Idealism. If the mind never knows the object, but always knows the effect alleged to have been produced by the object upon the brain, there is no ground for believing in the existence of the object at all. We may say that the mind (*A*) always knows the set of sensations or ideas (*B*) representing the object (*C*), and we may believe that (*C*) is the cause of the sensations or ideas (*B*). But if the mind never comes into contact with (*C*) it can have no knowledge of it; it cannot know, that is to say, that (*C*) possesses the property of being able to cause the sensations, nor even that it exists. The objects of our knowledge are, therefore, always events which occur in and to ourselves, and whether we interpret these events psycho-

logically or physiologically the same conclusion emerges, namely, that our knowledge is never knowledge of the external world.

To say that in knowing we are always enclosed within the circle of our own sensations is to assert Solipsism, an impasse from which the various forms of Idealistic theory seek, in my view unsuccessfully, their different ways of escape.

I have devoted this much space to a brief statement of this time-honoured theory, because it appears to me to be latent in a number of views which pass in modern philosophy under the name of realistic, and, by its unavowed presence, to convict them of repudiating my axiom. It lurks, for example, in such a theory as that of Critical Realism.[1] According to this theory the view that the mind is in perception directly in touch with a *physical* reality is open to certain fatal objections. These objections may be briefly stated as follows. In order that it may be apprehended, an object must, it is urged, somehow 'get into' consciousness, so that it may form part of it. Yet how can an object which happens to be apprehended by two people simultaneously be in two consciousnesses at once? What is more, how can it get into the consciousness of (*A*), who has normal vision, as something blue, and of (*B*), who is colour-blind, as something green? Again, if you look at a star, the experience of seeing the star may take place hundreds of years after the star has gone out of existence. It cannot, then, be the star itself that you see.

For these reasons it is asserted that what is experienced in perception is not the physical object itself, but what is called a character-complex or essence, which, although it is not the object, we take in perception to be one of the characteristics of the object. Adopting the same symbolization as that employed above, we may say, on this view, that when an object (*C*) comes into contact with a conscious organism (*A*), it exerts an influence over it. The influence causes (*A*) to project certain character-complexes (*B*) into the outer world, the form which the character-complexes take being partially although not wholly determined by the characteristics of (*C*). It is these character-complexes which appear to (*A*) when (*A*) is said to perceive (*C*), and in true perception they are or are identical with the characteristics actually possessed by (*C*). These character-complexes have logical but not physical being; we may say of them not that they exist, but that they subsist. They are not modified in any way by becoming the 'data' of perception, nor by being abandoned by the percipient for other data. Perception may, therefore, be described as a process in

[1] See Drake (Durand) and others, *Essays in Critical Realism.*

which we 'imagine character-complexes out there in the world together with an implied attribute of existence'.[1]

This view, which is somewhat variously stated by the American philosophers of whose joint thinking it is the outcome, appears to be exposed to precisely the same difficulty as that which besets Representationalism, and for the reason that it is merely Representationalism in a new guise.

If (*A*) always knows (*B*) and never knows (*C*), it cannot know that any of the characteristics possessed by (*B*) are in fact identical with the characters of (*C*); it cannot, that is to say, know when it has perceived correctly. That we may perceive wrongly is admitted, but how in this view can we know that we ever do otherwise? And if we cannot know this we have no assurance that we ever perceive the outside world at all, since every perception that we have may be of a character-complex projected by us, but owning no counterpart in the external world. Being denied all *direct* knowledge of the qualities of (*C*), all we can do is to hope that what we do in fact perceive when we try to perceive (*C*) may be like it. And of course it may be, but we have no assurance that it is; and we lack this assurance because what we do perceive is a projection of our own selves. But if we have no guarantee that the mind in perception is directly experiencing the outside world, we cannot know that the mind is aware of something other than itself. In other words, while appearing to assume it, we have in fact disavowed the axiom with which we started.

Another type of theory current in realistic philosophy is that which, while asserting the direct contact of the mind with the external world, assigns to mind discriminative, selective, amplifying, and interpretative functions in dealing with the material presented to it.

A typical statement of this view will be found in the writings of Professor Dawes Hicks.[2] Taking a red rose which he calls *R*, he points to the obvious fact that different observers will see in it different complexes of qualities. It will really appear in a different way to an artist (*A*), a botanist (*B*), and a colour-blind man (*C*), and these different appearances, *r*1, *r*2, and *r*3, will be conditioned by differences of interest on the part of the perceivers. This is not to say that *r*1, *r*2, and *r*3 are aspects of *R* which are created by the minds of the perceivers, and which do not really belong to it in its own right. On the contrary, each separate appearance

[1] See Drake (Durand), *Essays in Critical Realism*, Chapter I.

[2] See Dawes Hicks, Symposium, 'Are the Materials of Sense Affections of the Mind?' *Proc. Arist. Soc.*, 1916–17, pp. 434–5.

forms part of the whole complex of qualities or aspects which *R* itself possesses, and is discriminated or selected out of this complex by the mind. *r*1, *r*2, and *r*3 are, in other words, 'ways in which *R* is apprehended by *A*, *B*, and *C* respectively'.[1] Mind is thus endowed with the power of emphasizing some parts in a whole of presented aspects while ignoring others. We have only slightly to extend this function, as many Realists do, in order to credit it with the capacity for *arranging* the material. To say that (*X*) emphasizes in (*R*) what (*Y*) ignores involves an assertion that anticipates, if it does not already include, the further assertion that (*X*) will see first in (*R*) what (*Y*) sees second, and that (*X*) will see large what (*Y*) will see small. But if differences of interest determine the different time-orders in which observers see things, and the different degrees of occupancy of space which they attribute to the things they see, it would seem that the capacity, with which we began by endowing mind, for simply discriminating aspects of the given in the given, has developed into something much more elaborate, which amounts in effect to a rearrangement or remoulding of the material.

I referred in the last chapter to the view of William James that the raw stuff of which experience is composed comes to us as a continuum out of which mind carves its own objects, employing for this purpose a system of mental concepts. As a man's interests differ, so do his concepts, and as his concepts differ, so do the objects which the concepts are used to distinguish in the continuum. Pressure brought to bear upon a Pragmatist usually elicits the admission that the continuum cannot be quite featureless in the sense, say, in which a sheet of white paper is featureless, in which event we should manufacture at will the objects we perceive, but that the continuum contains within itself the seeds of all the distinctions and qualities that we subsequently see in it. What mind does is to seize upon these rudimentary distinctions and to work them up into the chairs and tables of ordinary experience. The mind, moreover, may make mistakes in the process. Thus beginning once more with the notion of mind as exercising purely discriminatory functions in relation to the given, functions which consist in cutting up the presented material and inserting stops and gaps into it, we advance to a position in which it is in a real sense the part artificer of the objects which we know.

The attribution to mind of frankly amplifying functions, though not always denied by writers who subscribe to the views I have

[1] Dawes Hicks, Symposium, 'Are the Materials of Sense Affections of the Mind?' *Proc. Arist. Soc.*, 1916–17, p. 443.

just been describing, is more characteristic of those who approach realism from a somewhat different standpoint.

I will endeavour briefly to indicate what this standpoint is. If I look at a table from a normal position in the room, what actually lies within my field of vision is a couple of legs, a ledge under the top, part of the surface of the top, the rim of the surface, and possibly a glimpse of the under side. Yet, in practical life I assume that I am seeing, and certainly make statements as if I saw, the whole table. This, as I shall try to show later, is a confusion. What I do is to think about the whole table; I never *see* more than is actually presented to me; for the present, however, I will continue to follow out the view I am describing. The whole table, then, on this view, is in part perceived and in part a mental construction, the mind going out beyond the data actually presented to it, and supplying the remainder from its memory of the tables it has seen in the past, and its past observation of their conformation and behaviour. Thus the core of the total perception of the table, being given as it were from without, is *actually* perceived; the rest is supplied by the mind which automatically invests the core with the accretions of memory and association. In other words, the fragment actually seen hints at or is representative of the whole, and the mind in accepting the representation is quick to take the hint and to fill in from its own resources the content represented.

A variant of this view is to regard the fragmentary data actually seen not as *representative* but as *presentative* of the whole.[1] If I actually see the top and two sides of a matchbox, yet seem, as seem I certainly do, to be aware of the whole, this is not because the top and two sides stand for or represent the whole, so that my mind, noting the indications they afford, reacts appropriately to the stimuli, and drawing upon its store of images of matchboxes seen in the past, provides an image picture of the sides unseen; but because the portions actually seen present to the mind the portions unseen. 'The sensa immediately present . . . "convey"' —the word is Professor Whitehead's—'other sensa not immediately present'.[2] In looking at the top of a matchbox, we are aware of more than the top, not because mind supplies the more from some mnemic store of its own, but because the top actually presents to us the bottom. The bottom is not, therefore, as it is

[1] See Nunn, *The Aim and Achievements of Scientific Method*, pp. 16–20; also *Anthropomorphism and Physics* (Annual Philosophical Lecture, Henriette Hertz Trust, 1926), pp. 14, 15.

[2] Op. cit. (Annual Philosophical Lecture), p. 14.

in the other view, an object supplied by mind and mental in character. It is a part of a physical object seen, as it were, by the eye of the mind. Professor Nunn's presentative view has this advantage over the ordinary representative one that it maintains that we are in direct touch with the objects we perceive and not with their representations merely; but it must be confessed that his notion of what it is that we perceive is, to say the least of it, open to question.[1]

Now with regard to all the views that I have been describing, it seems to me that, with the possible exception of the last, they do in fact offend against the axiom which I began by enunciating, although in appearance they observe it. If I once admit that mind may be credited with the power of manufacturing the material which forms the object of its knowing, then, all realists are agreed, I open the gates to the floods of Idealism. What many realists do not seem to recognize is that what is true of the manufacture of material is equally true of the manipulation, arrangement, selection from, or supplementing of material. If you admit that mind can 'do' anything to the data presented to it in perception, you are faced with the difficulty of distinguishing what it has done from what it has not done. You may cling steadfastly to the existence of a hypothetical given core of perception which comes to us direct from and belongs to the outside world, but who is to say where the core ends and the fringes and amplifications supplied by mind begin? And if you cannot positively affirm of any thing that it *is* the core, then it may always be a mental modification or amplification—and you can never know that it is not. In other words, you can never know that there is an external-world 'core' for your object of knowledge.

We may sum up the results of this discussion as follows. If mind can arrange the data of experience, it must needs produce a perceptual pattern which is other than that given in experience. If mind can pass beyond the fragmentary aspects of the object given in perception, and construct a completed picture of the 'whole' object, the picture, being other than what is given in experience, may bear no likeness to the hypothetical real object to which the aspects are thought to belong. Even if we confine the function of mind to that of active selection from the given, the drift away from reality is no less pronounced—or, speaking more accurately, we can have no more guarantee than in the

[1] Professor Nunn refers to Professor Spearman's account in *The Nature of Intelligence*, pp. 196–200, of the complexity of the perceptive process and the difficulty of determining what precisely is perceived.

preceding cases that the drift has not taken place. Our selection is determined, according to the theory in question, by the interests of the perceiver; this, no doubt, if we accept the standpoint of the theory, is true; what is more to the point is that the selection once made itself determines those interests. If in my capacity of, say, a botanist, I continually make a partial selection from the facts, my perception of reality will be determined by a standing bias. This bias will distort my view of the world, so that instead of thinking of reality as it is, I shall tend to make my perceptions dictate to it, at any rate in part, what it ought to be, manufacturing as the result a picture of the real which, though reinforced by each succeeding perception and progressively established by the mind's tendency to obtain and to obtain increasingly from reality the answer it expects, will bear no necessary relation to the world as it is. The devout Christian who finds in all the phenomena of nature evidence of providential design, and the atheist or antitheist (to adopt Swinburne's word) who triumphantly produces the same phenomena as evidence of lack of design, or worse, of malignant design, are crude illustrations of the process of unconscious selection of data and interpretation of the data selected in the interests of predisposing general conceptions. The Christian, the atheist, and the antitheist—all three cheat in their interpretation of phenomena, yet each fails to notice that he is cheating. Applying this illustration to the problem under discussion, the point I wish to make is that, if once the ability of mind to select from phenomena, ignoring some and as a consequence overstressing those which are not ignored, be admitted, the case of everyday perception becomes one with that of the cheating Christian and the cheating anti-Christian. Start by crediting the mind with the capacity to select from the given mind you will end in a position in which, through endowing the knower with legislative and formative power over the perceptions which form the data of his knowledge, you may have drifted right away from the given. The actual percept or thing perceived becomes a composite entity in the making of which the special interests and propensities of the perceiver have played their part, and the direct contact with reality is shattered. But to say that the data of knowledge are moulded and infected in whatever way by the interests of the knower is tantamount to the assertion not only that we never do know the world as it is, but that we never can so know it, since our own mental activities insist on inserting themselves and working up the material before it ever has a chance to become material for knowledge.

Once admit that some part of what we perceive may be due to

the active interference of the manipulative mind, and you can never assert of any part that it is not a product of this same interference. In other words, not only the things we perceive as a whole, but each part of them in detail may, for all we know to the contrary, be a product of our own creative mental activity. The idealist affirms roundly that they are; the realists, whose positions I have been considering, seem to me to be logically driven to the admission that they can never affirm that they are not, an admission which is quite sufficient for any reasonable idealist. Thus we find once again that we have only barred the hosts of Idealism from our front door in order to let them in by the back.

There is a way of escape from these difficulties, and there is only one. It is to regard the functions of the mind in perception as confined to a single uniformly exercised function, namely, that of simple awareness. This position leads to difficulties of its own; but if they are honestly faced, and if some complication of the constituents of the universe be admitted as a set-off against the simplification of the functions of mind, they will be found, in my view, to be soluble.

II. PERCEPTION AS THE AWARENESS OF SENSE DATA.

A theory of knowledge based on the principle just enunciated commits us in the first place to the view that the constituents of the physical universe are sense data. Not only are these sense data not identical with physical objects, but, if our theory of perception is followed to its logical conclusion, the physical object is found to disappear altogether. I proceed to consider these points separately.

(1) If by sense data we mean the entities we actually experience in perception, it is not difficult to see that these are not identical with what are called physical objects. If I place a shilling a yard away from my eyes and a half-crown six yards away, the shining white something that I shall see in the place where the shilling is will be larger than the shining white something that appears in the place occupied by the half-crown. Yet the physical object, the half-crown, is larger than the physical object, the shilling. From whatever point of view I regard the shilling, excepting only from positions immediately above or immediately below it, the shining white datum that I see will be elliptical; yet the shilling is circular. If I look at the shilling and press my finger against my eyeball, I shall see two shillings; yet there is only one physical object, and, if I encounter it by means of the sense of touch, I only feel one. It seems to follow first, that what I see, my visual shilling, is not

the same as the shilling which is a physical object; secondly, that it is different from the shilling that I touch. Yet the axiom with which we started requires us to suppose that the shilling that I see and the shilling that I touch are in no sense created by my acts of seeing and touching, but are discovered by them. Sense data, then, exist and are experienced.

(2) Coming now to the existence of physical objects, we find that if we accept the view that in perception we are in direct touch with sense data, there is no reason why we should be at pains to assert any form of existent other than sense data. The only reason for asserting the existence of anything is that mind discovers it in experience, or is able to specify the conditions under which it would discover it. But if you try to experience a physical object, all that you in fact meet with is a set of sense data, nor does it seem to be possible to imagine conditions in which this would not be so.

The subjective idealist used to point out that, whenever you try to get into touch with the actual world, your own sensations and ideas insist on intervening between you and the world you are seeking to experience; he inferred that, since nothing can ever be known except in and through experience, there is no world to be experienced which is independent of experience. Sense data occupy in the theory now put forward precisely the same position as that occupied by the ideas in the theory of subjective idealism. Like the ideas they insist on intervening between the knowing mind and the external world, if indeed there is such a world, of physical objects. And just as the idealist inferred that an external world that can never be known does not exist, so do we infer that a world of physical objects which can never be perceived does not exist.

We differ from him, however, first, in asserting that the mere fact that the sense data are perceived does not mean that they are dependent for their existence on perception; and secondly, by utilizing the sense data, whose independent existence is thus established, to repeople the external world which, so far as physical objects are concerned, has just been depopulated. The world, we say, consists of sense data which can be, and some of which are, perceived, and of minds that know them.[1] But the assertion that sense data are not in any way dependent for their existence on being perceived does not carry with it the entirely different assertion that the sense data we actually do perceive are not in part

[1] This is not to be taken to mean that minds and sense data constitute the whole universe. I shall deal with other constituents in later chapters.

dependent on physiological conditions within ourselves. If I put on blue spectacles, all the visual sense data of which I am aware are blue. This is not because the world is a blue world, but because of the modifications produced by the medium intervening between me and whatever it is that, in common parlance, I see; these modifications we must, I think, regard as constituting a new set of sense data, differently coloured from those which would have occurred in the absence of the spectacles. I emphasize the words 'in common parlance' because I wish to stress the fact that if I am to be strictly accurate, I must grant that the intervening medium itself forms part of what I see, the sense datum of which I am actually aware being thus conditioned by two sets of sense data, namely, those constituents of the external world which we would normally regard as being the sense data belonging to the external object, and those sense data which would normally be regarded as constituting what is called the intervening medium but which is also in fact itself an external object. The sense data constituents which belong to the so-called external object should not, therefore, in strictness be called sense data at all,[1] since in thinking of them independently of the intervening medium we are thinking of them as they are not and cannot be given to sense.

If it be objected that this is to postulate the existence of sense data which, since they cannot be known, are merely a late addition to the long line of successors to Locke's hypothetical substance, my reply is that the effect of the intervening medium, the interposition of which distinguishes the sense data that we know from those that we do not, is only operative when the sense data are in fact being known; and that, therefore, to postulate the existence of sense data independently of the intervening medium is the same thing as to postulate their existence independently of the knowing mind. Now if, while admitting that sense data are not dependent upon being known for their existence, we, nevertheless, hold that they do cease to exist whenever they cease to be known, then we must regard the coming into existence of a sense datum (leaving out of account for the moment the question of the intervening medium) whenever it is known, and its going out of existence whenever it ceases to be known as a coincidence, admissible perhaps if knowledge had taken place once only in the history of the universe, but miraculous beyond belief if it be supposed to occur whenever anybody knows anything. Unless, therefore, we wish to postulate the occurrence of such a miracle, or rather series of miracles, we must concede the existence of sense data which are

[1] The word 'Sensibilia' may be used to denote unperceived 'sense data'.

not perceived, including in our concession the existence of sense data which, although they can only be perceived through an intervening medium, yet exist independently of and unaffected by such an intervening medium.

Having conceded the existence of pure sense data, that is, of sense data which, not being perceived, have not been modified by any intervening medium, we must hasten to emphasize what is, for our present analysis, the important point, namely, the part played by the intervening medium in constituting the datum of perception or awareness. If the medium varies so does the datum. It is along these lines that we must seek for the explanation of such problems as that of the straight stick which appears bent in water. Since the medium differs when the stick is seen in water from the medium which intervenes in the normal case, we may say that we are literally seeing a different thing in the first case from that which we see in the second. We are apt to think that in the normal case we see the stick simply, and in the abnormal one the stick through an intervening medium of water. This, of course, is a misleading way of putting the matter. In the first case we see the stick through an air medium, in the second through a water medium as well as through an air medium. The sense data presented are, therefore, in each case composite, comprising the sense data both of the stick and the air in the one case, and of the stick, the water, and the air in the other. We may if we please regard the air data in contrast to the water data, as not exerting to any appreciable degree a distorting effect upon the stick data; but this may be a mere prejudice derived from the greater frequency with which we see sticks in air.

Now it is clear that the intervening medium must be regarded as extending right up to the point at which awareness takes place; it includes, that is to say, our own eyes and our nervous system. As these alter so will the thing we see alter, the alteration being due not to subjective considerations affecting the subject, but to physiological factors affecting the object. If I am colour-blind or short-sighted, I shall literally perceive a different datum from that perceived by the man with normal vision, a datum the character of which is conditioned by the peculiar characteristics of the intervening medium which is my organs of vision and nervous system. The nature of the sense data we experience is, in other words, modified by *physiological* but not *psychological* conditions in ourselves.

Here again we are in sight of the solution of several of the time-honoured problems of the theory of knowledge. The colour-blind

man sees a carnation blue; the ordinary man sees it green; the green carnation and the blue carnation cannot be both in the same place. Hence it is inferred, the carnation is neither green nor blue, whence the conclusion follows naturally that colour is not a constituent of the external world, but is a characteristic of our seeing. Therefore secondary qualities are mental, therefore mind creates colour, just as it creates other qualities, including, in the last resort, the object itself.

It is in these terms, or in terms very like them, that philosophers have propounded the problem which is thought to arise from the different perceptions men have of the same object in the same place; and it is along these lines that most philosophers have proceeded in their search for an idealistic solution of the problem. Once, however, the fact is grasped that not only do the two perceivers not see the same object, but do see different sets of sense data which are constituted in part by the characteristics of their nerves and visual organs, but also, as I shall try to show in a moment, that the object seen by the one is not in the same place as that seen by the other, the problem falls to the ground.

There is a prepossession in favour of supposing that the sense data seen by the man with normal vision through the medium of a normally constituted atmosphere resemble pretty closely the sense data as they are independently of perception, that is to say, before they are affected by the influences of our visual organs and nervous system; that, in other words, although the intervening medium is present in this case as in every other, the amount of distortion of the original datum which will obviously vary with variations in physiological structure, is in this normal case reduced practically to zero.[1] Normal perception is in fact a limiting case in which we see sense data more or less exactly as they are. I see no reason to question this prepossession, although, as with the normal air medium versus the distorting water medium through which we see the stick, there appear to be no means of verifying its truth. Whether it is true or not, whether, in other words, we ever see things as *they are* (if I may be permitted to use the most ambiguous phrase in philosophy), or whether we always see distorted versions of them, it has no direct bearing on the correctness of our analysis.

The question which next demands consideration is that of the

[1] See Nunn, 'Scientific Objects and Common Sense Things,' *Proc. Arist. Soc.*, 1923–4, pp. 12, 13. Professor Nunn is, so far as I am aware, the originator of this suggestion.

place at which the sense data we experience are. This is a complicated and difficult question upon which, although I cannot here deal with it as it deserves, something must be said. It should be pointed out, in the first place, that the whole notion of a thing being at a place is a highly complex and derivative one, to which modern physics finds difficulty in assigning any very definite meaning. With the growing tendency to identify matter with energy, it becomes increasingly difficult to set bounds to a thing by drawing a line between the point at which its substance ends and the energy it exerts begins. "The sun, we say, is the cause of heat, but the heat *is* the sun here on this window ledge.'[1] Hence an object in physics comes to be thought of as being wherever the field over which it exerts influence extends. There is no reason in theory why any limit should be assigned to such a field. The notion of a thing, in other words, is replaced by that of emanations from a centre, a centre at which there is nothing at all. This conception of the place at which a thing is is reinforced by relativity theory with its insistence on the impossibility of separating space and time. Hence arises the notion of a thing as a sort of hump or mound in space-time, rising indeed to a peak, but, extending indefinitely at the base in every direction. The same conclusion emerges from the neo-realist theory of knowledge. If we accept the sense-data view of perception I have been advocating, we find, as I shall try to show in a moment, that we are committed to the view first, that a sense datum is *at* the place at which the perception of it occurs, and secondly, as we have already seen, that a thing is nothing but the sum total of the sense data which would normally be associated with the thing. It follows that a thing is wherever it can be perceived, or, in other words, wherever an aspect of it appears, nor can the realist any more than the physicist set limits in theory to the number of places at which a 'thing' can in some sense appear.

These considerations should not be allowed to blind us to the obvious fact that there is a perfectly definite sense in which a 'thing' is at a certain place, that being a sense in which it is not at any other place. They may and should dispose us to recognize the great difficulty of saying precisely what that sense is, and in so doing to realize the complexity of the highly derivative notion which underlies the expression 'being at a place'; but they do not alter the fact that a penny is now in my right-hand trouser pocket and is not in my left-hand pocket.

I do not propose to enter into a lengthy treatment of this difficult

[1] Mark Rutherford, *More Pages from a Journal* (1910), p. 239.

question, which will be found fully discussed in Lecture III of Mr. Russell's work, *Our Knowledge of the External World*,[1] where he endeavours to give, and succeeds in giving in terms of sense data, a definition of what is meant by an object being at a place. So far, however, as the question which caused this digression, the question, namely, where are the sense data we experience, is concerned, there are certain considerations which have a direct bearing upon problems historically discussed in the theory of knowledge which might with advantage be mentioned.

Arguments have been adduced in favour of an idealistic interpretation of the data of knowledge, from the way in which our perceptions of objects vary according to the distance which separates us from them. Of these the most impressive is derived from Berkeley's famous illustration of our perception of a fire. If I am two feet away from the fire, I feel a certain sensation of warmth. As I approach nearer, the sensation increases in intensity until it transforms itself into a sensation of pain. Nobody would argue that the pain is in the fire; it follows that the warmth is not in the fire either. Warmth, then, is a mental idea or sensation and not an attribute of the external world. The force of this argument seems to be derived from an unduly simple conception of what is meant by the expression, 'the place where the fire is'. It is not clear, for example, why, if the heat of the fire is felt, say, a foot away from it, we should infer that the heat is not part of the fire, or, in other words, that the fire itself is not in the place where the heat is felt, just because we believe ourselves to see the fire in the grate. As Professor Nunn has pointed out, a thermometer placed in a position, say, a foot away from the fire, registers the degree of 'hotness' in the place where it is in just the same way as a human percipient situated in the same place, yet it is not argued, so far as I know, that the 'hotness' is a characteristic of the thermometer and not of the fire. I suggest, therefore, following Professor Nunn, that we must think of the fire not as being in a definite circumscribed place, but as spreading outwards indefinitely in various directions, in such a way that the varying 'hotnesses' disposed at different distances from the fire can all be considered to be parts of the fire.[2]

When a similar account is given of the phenomenon of hearing a sound which appears to possess different degrees of loudness according to the distance of the listener from the place where the sound is said to have occurred, little difficulty is experienced in

[1] See especially pp. 90, 91.

[2] Nunn, *Proc. Arist. Soc.*, 1909–10, p. 205, and 1923–4, p. 9.

accepting it. That a sound is not an isolated event which occurs in a certain specified spot, but a continuous wave which spreads outwards with gradually diminishing intensity from a centre, is generally agreed. Little difficulty is, therefore, felt in asserting that every noise we hear is at the place at which we hear it, while at the same time maintaining that all the noises so heard form part of the whole sound. The sound indeed is nothing but the sum total of all the noises which would normally be regarded as the noises connected with the sound, and the different degrees of loudness with which the sound is heard arise from the fact that listeners stationed at different points experience not one and the same object, but each of them a different object.

Starting, then, from the standpoint that a sense datum is at the place at which we experience it, can we not define rather more precisely where that place is? In order to do this, we must return to the question of the intervening medium.

If we assume that the body and the brain are themselves part of the intervening medium, and that this intervening medium affects the character of what we experience, it follows that the place at which what we experience occurs must be on the side of the medium which is nearest to our experiencing, or, in other words, in the brain. This conclusion indeed seems to follow from a consideration of what happens in a normal case of perception. Suppose that I listen to a voice speaking on the telephone, and ask myself where is the sense datum that I actually hear? It cannot be where it appears at first sight to be, at the speaker's end of the telephone, since, unless it travelled along the wire and reached my end, I should not hear it. Nor can it be in the receiver at my end of the phone, since unless the waves of sound travelled from the receiver and impinged upon my ear-drum, I should not become aware of them. If, moreover, the vibrations stopped at my ear-drum and did not travel along the auditory chords connecting the ear-drum with the brain, I should still fail to hear the voice. It seems necessary, therefore, that the chain of connected events which we call the sound of the voice should reach my brain, if the sensation which is called hearing the voice is to occur. We may cut out all the earlier events in the chain as irrelevant, since unless the later ones occurred, the sensation of hearing would not take place. There remains only the latest event in the sequence, which is presumably a modification in the tissues of the brain, the awareness of which may be said to constitute the hearing of the voice. I do not mean that the modification of the brain tissue *is* the hearing of the voice. This would be to imply a materialistic

conception of mind, which in the preceding chapters I have given reasons for rejecting. What I do assert is that when the modification of the brain occurs, and not till then, there occurs also the sense datum, the perception of which by mind or consciousness is called the hearing of the voice; the modification of the brain, in short, is the sense datum in question, a sense datum which occurs in the place where it is heard. Similarly every experienced event must be supposed to occur at the place at which it is experienced, namely, at the end of the neural chords which bring the message of the event into the brain. The function of mind in perception is that of simple awareness of the events that occur in the brain; indeed, so far as perception is concerned, we may say that a living brain is the meeting-place of all the physical events of which the mind is in consciousness aware.

On this basis we are enabled to give a more satisfactory account of the so-called subjectivity of perception than is offered by many forms of realism. It is plain that the events occurring in the brain of one person at a given moment can never be the same as those occurring in the brain of another. If we define these events as sets of sense data which would normally be regarded as the appearances of a 'physical object', we may say that no 'physical object' ever appears in the same way to any two people. The brain, moreover, occupies a definite position in space; hence the appearances of 'physical objects' at the place where the brain is, the awareness of which constitutes perception, may be defined as the view of the world from a given place. This view is called by Mr. Russell a perspective. However near together any two places may be taken, the view of the world from one of them will be different in every particular from the view of the world from the other. Hence no event which occurs in any one perspective can be the same as an event occurring in another. It follows that, so far as perception is concerned, mind must be regarded as being confined to its own private circle of objects as closely as it was ever conceived to be by the subjective idealists who, in spite of their attempts to preserve the existence of their fellows, found themselves drifting in solitary distress unto the quicksands of Solipsism. But since we have seen no reason to regard the objects which mind knows within this private world as being in any sense mental creations, and have limited their dependence on ourselves to partial dependence on physiological conditions within our bodies, the question of Solipsism does not arise. Each mind is the centre of a private world, and its function is limited to the awareness of that world's constituents; but the constituents are not affected by this

awareness, and would remain identically the same whether awareness of them occurred or whether it did not.

If this work were intended as a disquisition upon the theory of knowledge, it would be interesting to follow up the implications of this view in other directions. They would be in the main those with which the writings of Mr. Russell have made us familiar.

There is, for example, the question of the nature of the 'physical object' which I have been enclosing within inverted commas in order to indicate its hypothetical character. On this subject I should like to add a few remarks by way of rounding off what has been said.

We have arranged together the appearances of all 'physical objects' occurring at a given moment at the place where the brain is, in order to determine the contents of a mind, or more precisely, the content of which the mind at any given moment is the awareness. But we can also arrange together at the same moment the appearances of the alleged object at all possible places of observation, that is to say, in all possible perspectives. This second set of appearances, those appearances, namely, which would normally be regarded as the appearances of the object in question at all places of observation, is the object at that moment. The importance of this analysis lies in the fact that it dispenses with the necessity for the existence of a hypothetical object behind and in addition to the actual appearances or sense data normally associated with it, thus limiting the constituents of the external world to entities of the kind actually met with in perception, namely, sets of sense data.

In effecting this elimination the analysis is on the lines of the great idealist tradition. The neo-realist applies to the 'physical object' which 'has or causes' the sense data, precisely the same analysis as that employed by Berkeley to demolish Locke's hypothetical substance in which qualities were supposed to inhere. He agrees with Lotze's statement, 'It is not in virtue of a substance contained in them that things are; they are, when they are qualified to produce an appearance of there being a substance in them.'[1] In defining an object as the set of its appearances, he is also at one with Kant, who says: 'What is contained in our successive apprehension is considered as presentation; and the given phenomenon (though it is nothing but the whole of these presentations) is considered as their object,'[2] and 'The phenomenon, in contradistinction to our presentations of it, can be regarded as an object different

[1] Lotze, *Metaphysics* (Eng. trans.), vol. i, p. 100.
[2] Max Müller, *Critique of Pure Reason*, p. 156, line 19 et seq.

from them only if it is subject to a rule which makes a certain kind of combination of the manifold necessary'.[1] If these somewhat obscure remarks do not mean that there is no physical object behind the appearances, I am at a loss to know what their meaning may be. With the one important difference, that mind has played no part in determining, regulating, or modifying the presentations, it is Kant's view of the status of the physical object that I am asserting here.

The principle of Occam's razor is, moreover, strongly in my favour. If we never in experience meet with a physical object, that, as I said above, is the best possible reason for not assuming its existence, and, if we can account for the facts of experience in terms of awareness of sense data alone, there is good ground for effecting an analysis that at the cost of some complexity reduces the constituents of the external world exclusively to sense data.

There remains the question of error, that bugbear of all realistic philosophies. On this question I shall have more to say in the next section. For the present it should be sufficient to point out that, so far as perception is concerned, to assert that there is or can be erroneous perception is to assert a contradiction in terms. You cannot perceive what is not there; if, therefore, I press my finger to my eyeball and see two visual tables, that is because there are two visual tables for me to see. I have limited the function of the mind when experiencing the external world to that of simple awareness. It is clear, therefore, that it is not in any relation between mind and its object that the source of so-called error is to be sought, since that relation is always one and the same. It is, therefore, to the character of the entities actually experienced, or rather to their relationship with other entities, that we must look for an explanation of the difficulty.

Limiting ourselves strictly to the case of the perception of 'physical objects' in the external world, we may adopt Mr. Russell's view that 'objects of sense are called "real" when they have that kind of connexion with other objects of sense which experience has led us to regard as normal; when they fail in this, they are called "illusions". But what is illusory is only the inferences to which they give rise; in themselves, they', i.e. dream objects, 'are every bit as real as the objects of waking life'.[2] So far, then, as the rather limited case of so-called erroneous perception, e.g. of optical illusions or dream objects, is concerned, our theory holds that the objects really exist just as they are perceived, but that their con-

[1] Max Müller, *Critique of Pure Reason*, p. 156, line 30 et seq.
[2] Russell, *Our Knowledge of the External World*, pp. 86, 87.

nexion with other objects is not such as our past experience would lead us to expect. The case of the two lamp-posts seen by the drunkard, where the ordinary man sees one, is explicable in terms of the difference of intervening media in the two percipients. The drunkard's sense organs and nerves are excited and inflamed, with the result that the sense data of which he is aware and to the composition of which, as we have seen, these organs contribute, are actually different from those of the non-intoxicated man. The case of false beliefs as opposed to erroneous perceptions will be considered in the next section.

I have tried in this section to present, as far as may be, a coherent analysis of perception, while at the same time refusing to trespass too far beyond my immediate theme into the controversial region of theory of knowledge. It has been my concern rather to expound a particular theory than exhaustively to criticize rival ones. I have not considered all the alternative views to the one I have been expounding, nor the reasons which have led me to their rejection, but have been content to refer to other theories only when they are such as might be and have been entertained on the basis of a realist view of perception.

My immediate object has been twofold. First, I have tried to prove that the external world which we experience in perception exists exactly as it is perceived, and would continue to exist [1] exactly as it is even if it were not perceived. I have endeavoured to support the demonstration by showing that the arguments founded on the differences between two persons' perceptions of what is taken to be the same object at the same time, and between different perceptions of it by the same person at different times between which it cannot be supposed to have changed, arguments which are commonly advanced against such a view, do not in fact tell against it when it is realized that no two people ever do experience the same object, and that the same object is never experienced by any one perceiver on more than one occasion. Secondly, I have sought to emphasize the uniformity and singularity of the part played by mind in the process of perception, a part which may be described as a simple awareness of the data presented.

III. THOUGHT AS THE AWARENESS OF SUBSISTENT OBJECTS.

We have now to consider the nature of those mental activities other than that of perception, which are usually comprised under

[1] This summary does not of course take into account the extent to which the sense data we perceive are modified by our own physiological condition (see above, pp. 93, 94).

the general term 'knowing'. The activities chiefly in question are those of imagination, memory, belief, and judgement. The thesis I wish to maintain is that the mental processes involved in these activities are precisely the same as those involved in perception, and are reducible in every case to the function of simple awareness. There is no need, that is to say, when analysing judgement or memory, to postulate mental existents such as thoughts, images, or beliefs, or to invoke the occurrence of any mental activity other than the activity of being aware of a non-mental something which is presented. I will begin, as in the previous section, by taking examples of views commonly held of the mental character of the objects which we remember, imagine, or think about, and I shall indicate the objections to which, it seems to me, such views are exposed. I shall then proceed to a description of the theory already referred to, namely, that the activity of the mind in thinking is the same activity of direct awareness which we have seen reason to assign to it in perception.

(1) *Criticism of Current Views.*

(*a*) I propose to consider first the case of images. The view is usually taken that the mind is a storehouse of images. Every event, or every salient event, that has occurred in the biography of the individual is supposed to print an image of itself in his mind. If we wish we may at this point invoke the concept of the unconscious, and say that the image, though it is impressed upon consciousness at the moment of the occurrence of the event, passes with a greater or less degree of rapidity into the unconscious, and there remains latent until the occurrence of a similar or associated event, or a similar psychological condition in ourselves, recalls the image to consciousness. An analysis of the whole process in physiological instead of in psychological terms may be adopted, without in any way altering the fundamental notion of what it is that takes place.

If, then, on this view I picture to myself St. Paul's Cathedral, what is actually before my mind is a mental image of St. Paul's, this image having been formed in the course of a previous visit to the Cathedral, or from a picture, or during the reading of a written account, and which has remained latent until called up. The object of my thought when I think of the Cathedral is, therefore, a mental existent. There seems to me to be one very simple objection to this view. Let *A* stand for my thought, *B* for the mental image of St. Paul's, *C* for the Cathedral itself. Then *B* is a copy, reflection, symbol, or picture of *C*. The mind, we are told, always

knows *B*, but, unless *C* is actually present to perception, never knows *C*. But how in this event can we know that *B* is a copy of *C*? To know that *B* is a copy of *C*, or a reflection of it, or indeed that *B* refers to *C* in any way, it is necessary that we should know *C* as well as *B*. This knowledge of *C*, as well as of *B*, must be a direct knowledge of *C*, that is to say, knowledge which is obtained otherwise than by, and independently of, the roundabout knowledge through *B* of *C* as the original of the copy *B*. It is only, in other words, if we already know *C* directly and know *C* at the same time as we affirm of *B* that *B* is a copy of *C*, that we can know that *B* is a copy of *C*.

But if the knowledge that *B* is an image of *C* and not, say, of *Y*, involves a direct knowledge of *C*, what is the function of a mental image of *C* which is invoked for the sole purpose of explaining how knowledge of *C* could occur? If we know *C* directly, there is no need of a mental image; if we do not know *C* directly, we cannot tell that *B* is its mental image. But if knowing is an act of direct awareness of a physical object in which mental images play no part, it may well be asked in what way the mind can be directly aware of physical objects which are not present to the senses? I do not think that it can. I shall, however, return to the point in (*b*) below.

(*b*) Memory and memory images afford a special instance of the above difficulty. There are various theories in the field purporting to show how past events affect the present structures of our minds. Some of these theories are psychological, others physiological. Semon's theory of engrams is the best-known theory of the physiological type. It is in effect a scientific restatement of Professor Hering's theory of unconscious memory which Samuel Butler made the basis of his account of habit as unconscious memory. All simultaneous events occurring in the life-history of an organism form a connected excitement complex which leaves behind it what Semon calls an engram complex. The engram complex is a whole. The partial return of the situation which formed the original excitement complex calls out the *whole* of the engram complex caused by the original excitement complex. Thus, let an event complex *A B C* occur; this will stimulate the organism and leave behind it, after the stimulus is removed, the engram *X Y Z*. If at any future time *A* alone, or *B* alone, or *C* alone recurs, then the whole engram *X Y Z* will be called up. The engram, in other words, remains unnoticed until recalled to consciousness by a partially similar event; when it is so recalled, we are said to remember the original past set of events *A B C*, although what

we are in fact aware of is the present engram *X Y Z*. What we are conscious of, therefore, in memory is not the earlier event which we are said to remember, but the present modification of our own body or brain structure which is the engram produced by the earlier event. It is because the engram system of a man who has been, say, to New York is different from that of a man who has not, that the word New York means something wholly different to each of them, calling up in the mind of the former a stream of memories, images, and associations which are absent from the experience of the latter.

The fact that this theory is couched in physiological rather than in psychological terms, that it postulates an infinitely modified and modifiable brain structure rather than an unconscious stored with memories and images, does not seem to me to render it immune from the difficulties attendant upon the image theory referred to above.

Either the mind is directly aware of the event of which the brain structure bears an 'engrammatical' print, or it is not. If it is, there is no need to introduce an engram which intervenes needlessly between the mind and the past event of which it is aware, and performing no ascertainable function of any kind, falls beneath the blade of Occam's razor. If it is not, then it can never know with regard to the engram of which it is aware, that it is in fact an engram of that particular event and of no other, or indeed that it is representative or relates to any event that has actually occurred in the past.

In order to know that *B* is a copy or representation of *C* we must know *C* as well as *B*; and this consideration is divested of none of its truth if, instead of regarding *B* as a latent psychological entity which rises into consciousness, we define it in terms of modified cerebral or neural tissue.

A view of this latter type is put forward by Dr. C. D. Broad in his book, *The Mind and its Place in Nature*,[1] in connexion with his theory of traces or mnemic persistents. Dr. Broad's theory is briefly as follows. Causation holds not only in the physical world but also in the mental world; causation implies among other things, although it is by no means identical with, the notion of regular sequence, and of continuity between the sequent events. If, now, in the case of memory, we suppose that a present stimulus causes us to remember a past experienced event, and that nothing specially connected with the past experience has intervened between it and the present stimulus, then there is a gap in our

[1] Broad, *The Mind and its Place in Nature*, pp. 465 et seq.

biography, the gap, namely, between present stimulus and past experience, which certainly violates the condition of continuity and may violate that of regular sequence. Since continuity and regular sequence are necessarily implied in causality, we cannot in their absence postulate a causal relationship between the past experience which is remembered and the present remembering of it. It follows that the gap between them must be somehow filled with persistent conditions which stretch from the past experience which is remembered up to our present remembering. It is these persistent conditions which Dr. Broad calls traces. Whether they are to be regarded psychologically or physiologically does not seem to him to be a matter of great importance; it is their function rather than their nature upon which he insists. On the whole he is inclined to interpret them physiologically as 'simply modifications in the minute spatial or spatio-temporal structure of our brains and nervous systems, which are propagated from one state of the brain and nervous system to the next state'.[1]

On one point, however, Dr. Broad is emphatic. It is not the past experience which persists, but the trace of it, and there is no more reason to suppose that the trace resembles the experience of which it is a trace, than there is for supposing that 'persistent deafness resembles the attack of scarlet fever which left it in the patient'.[2]

But, if this is so, how can my being made aware of a present trace left by the sight of St. Paul's ten years ago cause me, when I now see it again, to remember the cathedral that I saw ten years ago? How, in short, can we remember anything, if there is no reason to suppose that the thing we now experience, namely, the present trace, bears the slightest resemblance to the past experience of which it is a trace, and which we are said to remember? That the present trace should be causally connected with the past experience is not sufficient to account for the remembering, if the trace bears no mark upon it to suggest that which gave rise to it. Moreover, even if the trace were like the past experience, it is not at all clear how the trace can bring to my mind the memory of the past experience of which it is a trace. Dr. Broad would, I suppose, maintain that it does not do so, what the trace does being to stimulate a memory image or the awareness of a memory image resembling the past event. But, as already pointed out, unless we know the past event we cannot know that the memory image resembles it. Thus, even if we admit the existence of traces, it seems difficult to conceive how they can perform the function for which they are invoked.

[1] Ibid., p. 468. [2] Ibid., p. 359.

But is it necessary to invoke them at all? They were introduced, it will be remembered, because Dr. Broad's view of mental causation required us to assume complete continuity between past experience and present stimulus. But need we adopt this view of mental causation? In order that causation may operate it is necessary that there should be a chain of events which stand to each other in the cause-effect relationship. These events may be either mental or material, according as we adopt a psychological or physiological view of memory, although in any event it would seem that the last event in the chain, namely, the awareness of the trace, must be a mental event.

Let us assume in the first place that the traces are mental existents or events. Now it is the existence of precisely this kind of mental event which, in the succeeding pages, it is my object to deny. A static mental event in the sense of a little segregated blob of mind stuff is something which is abhorrent to the dynamic theory of mind I am trying to put forward; yet, unless events of this type exist, it is clear that they cannot stand to one another in a causal relationship. The whole conception of a fundamental dualism upon which my metaphysic is based, involving as it does a radical distinction between life or mind and matter, presupposes that the laws which govern the behaviour of the one are inapplicable to the other; hence a causal relationship, as I conceive it, can only subsist between purely objective phenomena of the kind studied by physics. If the traces are mental existents, then besides their objective character as existents, they must be regarded as having also a subjective side, in that they are or may become knowing subjects or subjects of knowledge. No mental existent, if we admit the existence of such an entity at all, can be purely 'thing to be known'; it must also be in part 'thing as knower'.[1] And it is between things as knowers, or, as I should prefer to put it, between acts of knowing, that the notion of causation derived from the study of physical phenomena seems to me to be wholly inapplicable.

This is not a theory which I have space to elaborate here; all that I am concerned to do at the moment being to suggest that the doctrine of mental causation assumed by Dr. Broad so far from being necessitated, is open to serious objections. The nature of these objections, so far at least as they are derived from my general conception of the character of mind, will become more apparent as the section proceeds.

[1] For a development of this point of view the reader is referred to the argument on pages 108 et seq., where mental existents as opposed to mental acts are repudiated.

If we turn to the other possibility, reject the notion that the traces are mental existents and conceive of them as physiological modifications, a fresh difficulty arises. This is the difficulty of explaining how psychological events can cause physiological modifications, which become in turn the cause of similar psychological events. Why, in short, should X, which is a present psychological experience, cause me to become aware of Y, Y being a present but entirely dissimilar physiological modification, the awareness of which causes me to have another psychological experience, namely, memory of a past psychological experience Z? I should contend, therefore, that the whole notion of mental causation, in the interests of which the theory of traces is introduced, is inapplicable to mental life. This is not the place to argue at length in support of this position which, as I have pointed out, is only referred to in order to indicate how the necessity for traces may be obviated. But that the traces, if admitted, do not perform the function for which they are invoked is, I think, sufficiently clear, and, if they do not, then we must reject all theories of memory belonging to this class.

The whole difficulty which I have been trying to state in connexion with these theories is simply a variant of that which besets both the old copying theory of the meaning of truth, and the representationalist theory of perception, to which, in another connexion, I referred above. If we are told that we know only our own ideas, the belief that the ideas are caused by a hypothetical external world must remain an unverifiable guess which we have no ground for hazarding; in precisely the same way, the statement that in memory we know only our present engrams, but that these engrams are the prints or traces of past events to which we have no means of obtaining access, is exposed to the criticism that unless we are directly aware of the past events we have no ground for supposing that the engrams are prints of past events or indeed of anything at all. If they are, we must be able to know that they are, and, unless we can know this, it is a mere assumption to say that awareness of a present engram or of a so-called trace, if there is in fact such a thing as an engram or a trace, is memory of a past event. The only alternative is to suppose that some entity other than our own mental states, or cerebral disturbances, is directly present to the mind in memory, and that it is by comparison with this directly known something that experimental attempts to reconstruct the remembered event which are felt to be inaccurate are stigmatized as such. Some theory of this kind seems indeed to be in any case demanded by the well-known experience of trying to remember a

tune. Various tunes come into the head and may be actually whistled or hummed, only to be rejected as not being *the* tune we are trying to remember. But by what standard are we able to reject them, unless it is by the standard of the actual tune itself, or of something which is known to represent the actual tune? Something must be in some sense known all the time in order that the erroneous tunes which are tried over in the mind may be convicted of failure to conform to it.

The inference seems to be that when we are trying to recall something, we are in fact in some sense aware of the very thing we are trying to recall, or at least of some non-mental object which is known to stand for it. What is this object? Before answering this question I should like to add a few remarks on the general view of the nature of thinking, to which the preceding observations have pointed the way.

(*c*) I have been urging that the view that we possess mental images or memories of events is open to the objection that, unless we know the events themselves, we cannot tell that the images do in fact reflect them. If we have no means of verifying this correspondence between image and event by direct reference to the event, the image may, for all we know to the contrary, be a piece of gratuitous mental creation. I infer, therefore, that mind must have direct access either to the events themselves or to non-mental objects which stand for them. (The explanation of the last phrase I am for the present reserving.)

I have treated the cases of memory and of images at some length, because what has been said with regard to them appears to me to be equally applicable to the process of thinking in general, whether the thinking takes the form of judgement, reasoning, or belief. I do not wish to enter at any length into the general question of the nature of judgement; it will be sufficient for my purpose to point out that any arguments which are valid against the view that in perception we become aware of objects to the making of which our minds have contributed and not of an external world, apply with equal force to thinking.

To say that, when we think, the objects about which we think are our ideas, is tantamount to the assertion that we never think about anything external to ourselves. To assert that our ideas are copies of reality is to expose ourselves to the criticism advanced above, that unless reality is directly known, the correspondence cannot be made out. If we qualify these assertions by the statement that we are at least to some extent, or in some sense, in direct touch with reality, but that the mind in thinking takes the

given material and embroiders it, associates it, arranges or rearranges it, manipulates it or turns it into images, so that the ideas which form the content of our thinking are an amalgam of given reality and mental activity, we have not really mended matters. For once we admit the possibility of the intrusion of mental activity on these lines, or indeed of any type of mental activity which goes beyond mere awareness of the given, we can assign no limits to its operations. If mind can in thinking work up given material by supplying contents drawn from its own stores, we can tell neither where the mental supplies begin, nor, what is more important, where they stop. Once admit that mind can elaborate or go out beyond what is given to it, and there is no escape from the conclusion that all thinking may consist of nothing but such elaboration, with the result that you find yourself left with nothing to elaborate, or, to speak more precisely, with nothing of which you can positively affirm that it is not elaboration. It follows that we can never know of any of our thoughts or judgements that they are thoughts or judgements about reality, since we can never know that direct contact with reality has been achieved. Thus the distinction between judgements which are judgements about reality and mere hallucinations vanishes, and, for all we know to the contrary, we are the sole inhabitants of a world of our own imagining.

The way of escape from this conclusion lies in a rigid observance of the axiom stated above, that 'The knowing mind is always aware of something other than itself', or, in other words, 'that which the mind knows is always something other than the knowing of it'. But 'that which the mind knows' is an ambiguous expression, and it will be well to examine a little more closely what it implies.

The view is usually taken, even by those who maintain the existence of an external world which is independent of mind, that when one thinks about this external world there is something mental involved which is other than the active process of thinking, something which is variously called the content of the thinking, or, more simply, the thought, and that this something constitutes the direct object of the mind. On such a view, for example, as that of Meinong, there are involved in thinking three distinct entities, (*A*) my act of thinking, (*B*) the content of my thought, and (*C*) that which my thought is about. The obvious objection that (*B*) is an entity which somehow intervenes between thinking and object thought of, so that in thought we never really penetrate through to reality, is usually met by running (*A*) and (*B*) together. (*A*), when taken as the bare act of thinking, is, we are told, completely

empty of content; in itself it is nothing; since, therefore, we cannot segregate it as a distinct, particular thing even for the purposes of examination, we have no right to postulate it as a separate entity. It is, however, obvious that thinking about Smith is a different thing from thinking about Brown, and it is different simply because the content of the first thought, which is a Smith content, is different from the Brown content of the second. Hence there is more in thinking than the bare act (*A*); there is the mental content of the act (*B*).

Now in asserting that what the mind thinks about is something other than the mind itself, my chief concern is to deny the existence of this mental entity which is mixed act and content; and I deny it for the reason given above, namely, that if, stressing the content side of the amalgam (*A*) (*B*), we hold it to be the object of the mind in thinking, that *about* which we think, then we are never in thinking in direct touch with reality. We never get through to the real, just because the content of our own thoughts insists on interposing itself and becoming the object of our thinking.

If, on the other hand, we stress the active thinking side of the amalgam (*A*) (*B*), then, while we succeed in saving the direct contact between mind and reality, we do so only at the cost of suppressing the content *B*. For what is the use of postulating a content to your thought, if you are compelled to admit that it is not the content that you think about? Simply, it may be answered, to account for the fact that thinking about Brown is different from thinking about Smith, a difference which it is impossible to explain if you reduce the 'thinking' to a bare undifferentiated activity. But this reason is not really adequate. If we can successfully limit the activity of the mind in perception to mere awareness, accounting for the difference between being aware of a table and being aware of a chair by a simple reference to the different objects of the awareness, why should not a similar analysis hold good of what is called thinking? Perceiving Smith is different from perceiving Brown just as photographing Smith is different from photographing Brown, not because the acts of photographing are different, but because of the differences between the objects which the acts reveal. And what is true of perceiving Smith and perceiving Brown is true also of thinking of Smith and thinking of Brown. And what is true of the one is necessarily true of the other, for the activity of the mind in perception is not one thing while the activity of the mind in thinking is another; on the contrary, both activities are identical, the difference between perceiving Smith and thinking of Smith being not a difference between types of mental activity,

but a difference between the objects upon which the two activities are directed. In other words, the Smith of whom you think is different from the Smith whom you perceive. But the Smith whom you perceive is really Smith. Who, then, is the Smith of whom you think? I shall return to this question in the next section.

For the present I wish to complete what I have to say on the subject of thinking by applying the doctrine that thinking is an activity in which mind becomes aware of something other than itself to the questions of (i) the nature of judgement, (ii) the phenomena of self-consciousness, and (iii) the general character of reasoning. Before adding a few words on these three points, let me restate the theory which I am trying to put forward, as follows:

Mind in thinking is always aware of something other than itself. This something is not and cannot be its own thoughts, for the reason that there is no such thing as a thought. There are no thoughts but only thinkings, and a thinking is a being aware, a being aware which is also a process of continuous change. If it is the nature and function of mind to be aware of something other than itself, then a mental existent which is a thought, that is to say, something about which there can be a thinking, and not itself a thinking in the sense of an awareness of something which is not itself, is alien to the nature of mind.

(i) A consideration of the character of judgement in the light of this position suggests first, that judgement cannot be a special kind of relation between mind and its object, since, as I have tried to show, the relation of mind to its object in all forms of mental activity is never anything else than an awareness. Secondly, that, for the same reason, the truth of a judgement can be a property neither of this relation nor of the act of judging, but must be a property of the objects known in judgement and the relations between them. Thirdly, that the objects about which judgements are made cannot be mental existents, and that any theory of the Bradleyan type which regards judgement as the predication of an ideal content of reality must, therefore, be rejected. Fourthly, that judgement cannot be an assertion of the connexion apprehended as existing between two or more mental ideas.

If we eliminate these theories, the only view of judgement that remains open to us is the view that in judging we assert a specific connexion between two entities both of which are objectively valid; these entities will further be of the nature of universals or, as I prefer to call them, subsistent objects, on the status of which I shall have something to say in the next section. Both the entities between which the connexion is asserted, and the connexion which

is apprehended as subsisting between them, will be non-mental entities which are directly apprehended by mind. Thus the function of mind in judgement is confined to the simple awareness, which is all that we have claimed for it in other connexions. Judgement, then, is the apprehension of a connexion between two or more subsistent objects, between which the connexion is apprehended as subsisting. To judge that X exists is to assert a specific connexion between the subsistent object X and the subsistent object existence.

(ii) The view that there can be no such thing as a mental existent, in the sense of a thought or idea which is the object of thinking, appears at first sight to break down in those cases in which we are, as we say, aware of our own thoughts. That we not only know, but also know that we know is a commonplace, and the phenomenon of self-consciousness has by many thinkers been regarded as so important, that they have made it the basis of their own philosophies and treated it as a guiding principle to the interpretation of the universe. According to Hegel self-consciousness is the primary example of that identity in difference which was for him the test of concrete reality. The Italian neo-idealists have carried the principle farther, and Gentile regards self-consciousness as an activity in which the mind, while postulating itself at once as object and as subject, still remains an entity which is one with itself. Self-consciousness is thus a self-engendering activity in which the object of consciousness, being regarded as part of the activity engendered, affords the most obvious example of the mind's double activity in at once creating reality and knowing the reality which it has itself created.

Now although it should be sufficiently clear from what has already been said, that this whole view of the nature and activity of mind is in the main the antithesis of my own, it embodies, nevertheless, a conception the importance of which I should like to emphasize for my own purposes. While admitting that what for the neo-idealist is a continuous creation of what was not there before is for me a continuous discovery of what is in some sense already there and waiting to be discovered, yet I may be permitted to point out that this activity, which the neo-idealists call creation and I call discovery, is for both parties something which is spontaneous and dynamic. My view is at one with theirs in vehemently rebutting the conception of the mind as passive and dormant waiting for events to occur to and in it. For me as well as for them—and here I think that in learning from Gentile I part company from many of the neo-realists—the mind is continuous activity, so

that, although my analysis of that activity limits it to a becoming aware of what is there, yet the impulsion to an ever more extensive awareness is a dynamic constantly impelling force.

Given, then, my radically different analysis of what the function of activity implies, I can accept practically all that part of Gentile's philosophy which lays stress upon the fact of mind *as activity*. I can indeed almost find it consonant with my view to adopt the word 'creation' as connoting the essential characteristic of mental activity, provided that I am allowed to modify the more ordinary meaning of the word, which is intended, as far as I can gather, to signify the production of something out of nothing, in order to use it to denote a newness of vision. Newness of vision, however, to introduce a further qualification, is a phrase which must itself be taken to imply not a seeing of something which is new, but a new seeing of something that is old, the object being newly seen rather than newly existent. If the word 'creative' can be applied to the process of mind's activity, whereby it continually develops within itself the capacity for a deeper and wider vision of the world, then mind, or as I should prefer to say with Bergson 'life', is essentially creative in the sense in which such writers as Gentile have used the word 'creative'. That mind, as a dynamic force, should possess this capacity for developing vision, is in accordance with the characteristics of life as opposed to what is not living, which I tried to sketch in the first chapter, and to which I shall return in the next. For the present I am concerned only with that particular function of life which, under the name of knowing, is studied by theory of knowledge; and with regard to this function I assert two things. First, that it is creative in the sense in which Gentile and Bergson use the phrase, that is to say, it is a perpetual bringing into existence of something that is new; secondly, that this something new is to be interpreted as an added power and penetration of vision rather than as a fresh type of existent. Just as for Plato the function of philosophy was to turn the eye of the soul towards reality, so that it might apprehend objects of which the ordinary man was unaware, so every advance in the scope and power of mind involves on my view an increase in the number and a change in the character of the objects in the awareness of which what we call knowledge consists. This question will, however, be considered at more length in later chapters. I shall conclude the present section by returning to the question from which I digressed above, the question, namely, of our knowledge of our own thought in self-consciousness, prefacing what remains to be said on this subject by advancing certain considerations on the

character of reasoning in the light of the general view of thinking just indicated.

(iii) It is, I think, clear that we are committed by this view to holding that all reasoning is intuitional in character, since the direct awareness which mind exercises in its relations with the external world must extend also to the apprehension of propositions as being true and of premises as being self-evident.

So far as axiomatic propositions of a general character are concerned, this seems sufficiently clear. The perception that the whole is greater than the part is grasped intuitively by mind, and, since no reason can be given for holding the proposition to those who choose to doubt it, I may add that it is grasped irrationally. What is not so generally recognized is that the process of reasoning, whereby certain propositions are said to follow from initial self-evident propositions, is equally intuitive and equally indefensible on rational grounds. The realization of the fact that all the straight lines drawn from the centre of a circle to its circumference are equal may be admitted to be intuitional: one sees that it is so; but equally intuitional is the recognition that it follows from this observed fact about the circle that the triangle made by joining the points at which any two radii cut the circumference is isosceles; if any one denies it, that is to say, there is no way of convincing him that it is true.

The intuitional character of all reasoning process can be clearly seen if we consider the syllogism. Let us take the ordinary example. All men are mortal; Socrates is a man, therefore Socrates is mortal. Now we can say, as critics have often pointed out, of the conclusion, Socrates is mortal, that it is either already contained in the premise or that it is not, that, in other words, it is either not new or, if it is new, it is not necessarily true. On the first alternative the major premise can only have been reached by first enumerating all known instances of men and finding that they have died. In enumerating all such instances we must already have considered Socrates, and included him in our catalogue as being a man. The mortality of Socrates is, therefore, already vouched for in the major premise and is not, therefore, new.

But we have not in fact counted all men. Unless, therefore, we mean by 'all men are mortal', all men that we know, we have stated something which we have no means of verifying and no ground for supposing, unless we are prepared to argue from the behaviour of the men we know to the behaviour of those we do not. But the legitimacy of arguing from men that we know to men that we do not know can be doubted, nor is there any way

of silencing such doubts. It seems to follow that the apprehension of the major premise as true, in the case in which we suppose the conclusion to have been already reached before the major premise can be stated, is both intuitional and irrational.

On the second alternative the conclusion is not contained in the major premise, nor is it contained in the minor. Therefore it is new. How do we know, then, that it follows from what has just been stated? Again we can give no reason for our knowledge; we just see that it does. Therefore our apprehension of the truth of the conclusion is both intuitional and irrational.

In general we may say that where (*A*) is the major, (*B*) the minor premise, and (*C*) the conclusion, direct unanalysable and indefensible intuitions are involved:

(1) in recognizing the truth of (*A*), since the statement of (*A*) necessarily goes beyond the observed evidence;

(2) in recognizing that the particular specified in (*B*) is an instance of the class mentioned in (*A*), i.e. that Socrates is a man;

(3) in recognizing that assuming both (*A*) and (*B*) to be true, they provide adequate ground for supposing that (*C*) is true.

(3) in fact involves two distinct intuitional recognitions: first, that (*C*) is true, second, that (*C*) is true *because* (*A*) and (*B*) are true.

Now each of these four separate recognitions is irrational in the sense that in the last resort no reasons can be given for the recognition of the truth of the propositions which are asserted. No answer can be given to those who refuse to subscribe to the recognition, and no considerations can be advanced to make them accept as adequate reasons for the recognition which we have accepted as adequate.

All reasoning involves either a direct recognition of what is called a self-evident proposition, or else a recognition that some other proposition follows directly from the self-evident proposition, and is therefore true. But the second recognition is as direct and as indefensible as the first, and the distinction between immediate intuitional apprehension and mediate rational conclusion falls, therefore, to the ground. While, however, each is equally direct, a so-called mediated conclusion arrived at by the process of reasoning involves a number of such direct intuitional apprehensions, while the grasping of a self-evident proposition involves only one. Putting the point in another way, we may say that all induction rests in faith; faith, moreover, of precisely the same kind as that involved in the acceptance of the dogmas of religion. 'Our holy religion is founded on faith,' said Hume, and proceeded to an ironic treatment of the scientists who fondly imagined that their

simple belief in the order of Nature was founded on something more solid. In cogency of reasoning, science has no superiority over religion; the difference is that religion remains content with self-evident propositions, while science proceeds to deduce from them non-self-evident propositions by self-evident steps.

Particular illustrations of this general conclusion are afforded by the notion of rational proof, by the principle of induction and by the law of cause and effect. As regards the notion of proof, it is usually held that it is possible to prove certain propositions, e.g. that two sides of a triangle are greater than a third, in such a way that nobody can disprove them. This view seems to presuppose that there is a formula for proof, which is such that, if it is satisfied, then the proposition which it proves must be true. Let us suppose that we are furnished with such a formula of proof (X) which is such that, when (X) is satisfied, then the proposition which satisfies it is true. We shall proceed to ask on what grounds the formula (X) is accepted as an adequate formula for proof. Suppose, for example, we take leave to doubt it, how can we be convinced that the formula (X) really does establish a satisfactory test of proof? It is obvious that there can be no method of convincing us. It cannot be proved that (X) is a satisfactory formula for proof, since the proof itself would have to be given in terms of the formula (X), and would require, therefore, in order that it might be accepted as satisfactory, to assume the validity of the very formula it was trying to establish. But if it cannot be proved, the adequacy of (X) as a formula for proof must remain unestablished, unless the mind is prepared to embrace it as it stands unconfirmed by reason and unsupported by proof. Rational proof, in other words, rests upon a non-rational basis; and the operations of reason depend upon, just as at every stage they involve, intuition. Reasoning in fact is merely a seeing of successive things, but things of a certain sort only, seen in a certain order of succession.

Next let us consider the principle of induction. Induction is, in Professor Whitehead's words, the 'despair of philosophy', and yet all our reasoning activities are based upon and presuppose it. The difficulty about induction is simply that of finding any rational justification for a process which is the chief instrument of our reasoning. Either, Professor Whitehead points out in *Science and the Modern World*, the immediate occasion affords knowledge of the past or the future, or it does not; if it does, then it is not really distinct from them; if it does not, we are reduced to utter scepticism in regard both to memory and to induction.[1] Professor

[1] Whitehead, *Science and the Modern World*, pp. 55 and 64.

Whitehead's solution of this difficulty is well known; the real occasion of knowledge, the concrete event, is for him a complex unity in which both past and future are prehended; it is not, therefore, distinct from those other occasions of which it gives knowledge.

Such a solution presupposes a different metaphysic from that advocated in this book, and for this reason, attractive as it is, I cannot here adopt it. All that I can do is to stress the fact that if, as I hold, events really are distinct from each other—and, unless we are prepared to take the Absolutist way or Professor Whitehead's way, we must hold that they are—then no amount of knowledge about one event can possibly supply information about another. The induction problem is, therefore, for me the same as the cause-and-effect problem. Here again as Professor Whitehead has pointed out Hume's demonstration of the complete lack of evidence for the so-called law of cause and effect has never been answered, nor, in his view, can it be answered so long as scientists persist in regarding the physical universe as irreducible brute matter spread throughout space. On this basis, just as no one event can give information about another event, so no one piece of matter can affect another piece of matter. And it cannot affect it for the simple reason that it cannot get at it. Just as there is nothing in any given state of nature which enables us to infer from it to any other state, so there is nothing in the present fact which inherently refers either to the past or the future;[1] the given fact or state cannot, therefore, be caused by a preceding or be the cause of a succeeding fact or state, since this would be to affirm an organic connexion between facts and states, and there is, on this view of nature, no such connexion. There is no necessity, therefore, in induction, simply because induction is not based upon any necessary connexion which can be observed in the order of nature. If there is no necessary connexion between things, then there are no necessary connexions in reasoning process. Yet logic is based on induction, and science upon faith in the order of nature!

Being precluded from taking Professor Whitehead's way out of the difficulty, my only course is to emphasize the facts that the basis of both logic and science is irrational, in the sense that no grounds can be given for our belief either in the validity of reasoning or in the order of nature, that the principle of induction and the law of cause and effect, which are normally invoked to guarantee the one and to ensure the other, cannot be employed to establish their own validity, and that we are thrown back, therefore, upon intuitive apprehension, which is at once unanalysable

[1] Ibid., pp. 65, 66.

and indefensible, as the test of truth and the criterion of reality. Either we see that *X* follows from *Y* and that *A* is the cause of *B*, or we do not; and, if we do, we are still without any defence against those who affirm that they do not. We cannot, that is to say, defend or justify our intuitions to those who do not share them; all that we are entitled to do is to assert of such persons that, since they fail to perceive connexions of which every one else is aware, and since, moreover, life expresses itself in the activity of awareness, they are in respect of their failure not fully alive, or rather life has failed to reach in them the level at which it has emerged in the rest of us. It is, as I shall try to show in later chapters, precisely upon such unanalysable and indefensible intuitions that our appreciation of value, whether in the form of beauty or of goodness, is founded; aesthetics and ethics rest, in other words, upon a basis as irrational as those laws of reasoning process to which we give the name of logic, and the perception of that connexion between events which we call the order of nature.

Returning to the case of self-consciousness, I wish to emphasize the fact that if knowing is a dynamic, creative act of the kind suggested, then it can itself be known only in the experiencing of it. All direct awareness is intuitional in character, in the sense that we cannot give reasons why it should occur. It is, moreover, unique and unanalysable in nature, being the fundamental and unchanging form of the relation of mind to the outside world; and, since it cannot be expressed in terms of anything other than itself, to describe it would be to misinterpret it. In order that it may be comprehended, awareness must, therefore, as Bergson says of experience, be 'lived through'.

Now it is perfectly true that we can contemplate our own acts of thought; but our acts of thought as contemplated are different from our acts of thought as experienced. You cannot, in other words, present the activity of the experiencing subject to the subject that experiences, just because it is the nature of the subject to experience and not to be experienced. It follows that the experiencing of the subject, that is to say, whatever the subject experiences as thinking subject, must be different from anything that the subject can experience as object. As James Ward says somewhere, you cannot see your own seeing, although you can realize that you see. Hence, whatever it is that we are aware of when we contemplate or reflect upon what we call our own thoughts, it is something other than the thinkings, as I must insist on calling them, which actually occurred in and to us as experiencing subjects.

What, then, are the objects of our thinkings, if they are not our own thinkings in the past? To this question, which has presented itself on a number of occasions during the recent discussion, it is high time that I should endeavour to return some sort of answer.

(2) *The Theory of Subsistent Objects.*

I have tried to show that thinking, like sense perception, is a process in which the mind is directly aware of some object or objects other than itself, and I have also given reasons for supposing that these objects of which mind is aware are never mental existents. But if it is not a mental existent of which I am thinking in judgement, in memory, or in imagination, what sort of object is it? One answer to this question is that it is a physical object. If I now think of St. Paul's, it may be said that the object actually before my mind is a physical structure (or perhaps I should say a physical event or series of events), occupying a definite position in space-time, which is called St. Paul's Cathedral. Mind, then, is to be credited with the mysterious power of being directly aware of physical objects which are not present to the senses, occupying, as in the case of St. Paul's, different positions in space, and, in the case of past events, different positions in time.[1]

There are, I think, several reasons why this answer is not the true one, of which the following appear to be the most important:

(i) The physical object is, according to the analysis given in Section II, a system of appearances presented at all possible points of observation, each of these appearances being such as would be normally characterized as the appearance of the object in question. The appearance of the object at the point of observation occupied by a brain is a set of sense data. All we actually experience when we perceive a table is a brown sense datum, a shiny sense datum, the sense data connected with the visual appearances of two legs and a top, a cool, hard sense datum when we feel it, a sharp, rapped sense datum when we tap it, and so forth.

But although these isolated sense data are all that we perceive, what we think of is the whole table. Although, therefore, the whole table considered as a physical object is never perceived by us, and does not in fact exist in space-time, except in the form of sets of momentary sense data which occupy different positions in

[1] Cp. Professor Laird in a Symposium, Realism and Modern Physics, *Proc Arist. Soc. Supplementary*, vol. ix (1929): 'Speaking in terms of local astronomical time . . . we say, in ordinary speech, that we see the sun *now* as it is now; and we are informed by astronomers that, if we could see it, it would be eight minutes old. . . . But why should realists not say that in this case we perceive a past sun, which we mistakenly take to be contemporaneous with the act of perceiving?'

space-time, we do in fact think of a whole table. The usual explanation of this fact is that mind goes out beyond the sets of sense data, or appearances actually presented and constructs from among them a table, which includes not only these appearances but also those appearances which experience has shown would have been presented at neighbouring points of observation. But I am abjuring this constructive power on the part of mind, and cannot, therefore, have recourse to this explanation. All that I can say, therefore, at this point is that when we think, as we certainly do think, of a whole table instead of thinking of sets of sense data, when we speak of a table as if it were a whole table and actually believe that we have seen a whole table, it is clear that the object of which we think and speak, the object of which our minds are aware, cannot be the series of sense data which we experience in perception.

I may appropriately point out here that it is this very circumstance that mind can and does think of objects which are quite different from the objects which we experience in perception, that has caused most thinkers to attribute to mind constructive and interpretative powers; mind must, it has been felt, construct the whole object of which it thinks since it only experiences parts of it. There is, however, an alternative explanation of the circumstance to which I shall come in a moment, which does not involve this attribution, and, unless we are prepared to go the whole way with the idealist, we shall be wise to resist all temptations to embark upon the seas of mental interpretation and construction.

(ii) The second reason depends upon the first. When we have sensory experience of the external world, the entities of which we are actually aware are sense data. For the reasons given in Section II we cannot, if we try to locate the sense data, resist the conclusion that they must be at the place at which the experience of them occurs, i.e. in the brain. What is called the perception of an object is, in fact, the appearance of the so-called object at the place at which the brain is. Although, however, the object may be defined as the sum total of the appearances of the object at all possible places of observation, there is, as I have already pointed out, a sense in which the object may itself be said to be in one place rather than in another.

Now although the notion implied by the word 'place' may be extremely difficult to define, and, under the influence of modern physics, has become increasingly so, it would not, I think, be denied that it is a perfectly definite and legitimate conception. There is, that is to say, some sense in talking of an object being

at a place, although it may not be easy to say what that sense is. In precisely the same way the sense datum we experience is also in a place, namely, in the place where our brain is. Now it is just in this sense that the table of which we think is not at any place. The very fact that we are able to think of it as being where we please, and that we are not bound to think of it as being at one place rather than another, indicates that it *is* not at one place rather than at another. Consider, for example, the instance of St. Paul's. I can think of it as on the Embankment just as easily as I can think of it as on Ludgate Hill, the transference of its site from the place where it actually is to the place where it is not making not the slightest difference to my thought of the cathedral itself. That thinking of St. Paul's on the Embankment is different from thinking of it on Ludgate Hill is true; but this only means that to think of St. Paul's in one set of surroundings *is* different from thinking of it in another set, when the two sets of surroundings are really different. But when we think of St. Paul's apart from its surroundings—and unless we hold the doctrine of internal relation, it is, I think, clear that we can do so—we can think of it as being in itself unaffected by the place where it is. And we can, I submit, do this just because the St. Paul's we think of as opposed to the St. Paul's we see is not in any place. The objects of thought have no place and no time in the spatio-temporal continuum, and are, therefore, independent of time and place. The objects of sense are always perceived as being at such and such a place, and a definite meaning can therefore be ascribed to the expression, 'the place where a physical object is', even if the physical object be resolved into sets of sense data.

(iii) Thirdly, it is clear that considerable differences may exist, and may be known to exist, between the object of thought and the object of sense. These differences may be noticed and established at times at which both objects are simultaneously present to the mind. Suppose, for example, that I am travelling to a country railway station that I have not seen for some years. I have a distinct conception of the station, and, if the place to which I am travelling has pleasant associations, may dwell with pleasure upon its various features. If we reject the image theory as an explanation of my mental processes, it follows that I am thinking of something which is not mental. On arrival, I find that the station I perceive is different in important particulars from the one of which I was thinking, not because it has changed, but because I had, as we say, got the details wrong. The station-master's office turns out, for example, to be on the left and not on the right of the waiting-

room, and its name is inscribed in red letters and not in blue upon the door; there are six lamps and not five on the platform, hollyhocks as well as wallflowers in the station garden, and so forth. What I had before my mind when I thought of the station is, therefore, different from the station as a set of physical existents; not only is it different but it is perceived to be so, and it is perceived to be so only because I am able to entertain in thought (I am speaking loosely here) the station I remembered, at the same time as I am perceiving the set of physical existents which make up the actual station, and to contrast the two.

The example of the tune which I am trying to remember cited above affords a good illustration of the point I wish to emphasize. Each separate tune that I do in fact think of is rejected because of its recognized incompatibility with the tune I am trying to remember. If I were not aware all the time of the tune I was trying to remember, I should not know that the tunes which occurred to me were not the ones I wanted. I must, therefore, be aware in some sense of the tune which I am trying to remember and assert that I have forgotten. But in what sense? I cannot whistle it, nor hum it, nor derive any pleasure from perceiving it as a physical existent. It is not, therefore, of the tune as a member of the world of physical existents that I am thinking since, if it were, I could reproduce it and enjoy it through my sense of hearing. Yet I am aware of it. It follows that what I am aware of is something other than the set of sense data which we call the physical object, and other than all sets of sense data whether actual or possible. This something of which I am aware when I am trying to recall the tune which is itself a collection of sense data, is what I call a subsistent object.

(iv) St. Paul's may, for all I know, have ceased to exist as a physical object, yet I can still think of it. The physical object which was Caesar, for example, no longer owns a position in the spatio-temporal continuum, or rather, in so far as it exists, its component parts are by now so distributed through the constituents of the physical world, that Caesar, *as a physical entity*, is indistinguishable from the worms, grass, cattle, and other human beings into whose substance he has passed. When I think of Caesar, therefore it cannot be of Caesar the physical object, a body with mind and soul subsisting, that I am thinking, since no such object exists, and I cannot think of nothing. I conclude that I am thinking of a subsistent object.

The recognition of the existence of objects of thought which are other than objects of sense seems indeed to be forced upon us

by a number of considerations. Idealist theory makes great play with the absurdity of supposing that the table exists when it is not perceived. If I shut my eyes and think of the table, it is, says the subjective idealist, an idea in my own mind of which I am thinking. Now it has always been a matter of some difficulty for realists rejecting this view to explain how, when sense perception was in abeyance, I could think of something which was only known to sense perception by and through the operation of the senses. Faced with this difficulty they have usually been driven to admit the existence of a mental existent, such as an image of the table, to serve as the object of our thinking when we shut our eyes and think of the table, an admission which, I have tried to show, opens a breach in the strongholds of realism through which the full flood of idealism must sooner or later make its way.

Now if we take our stand upon the assertion that the table of which we think is the same table as that which we have just perceived, these difficulties do in fact arise. But why should it be the same? If I look at a table, what I see is a set of sense data occurring in a certain determinate place. If I think of it, I think of a whole table which it is not necessary to regard as being in any place. The table I think of cannot be touched or seen; if it could, it would not be a table, but two sets of correlated sense data which are respectively tactile and visual. Unless, therefore, we are to invoke a mental existent to figure as the object of our thinking, we must admit the existence of the table of which we think as an object of thought, which is distinct from the table we see.

Approaching the question from another point of view, let us consider what happens when perceiving two colours, say a shade of red and a shade of pink; we say of them that they are like each other. It is clear that in addition to the two colours we also notice the fact of their resemblance. The fact that the particular shade of red resembles the particular shade of pink and vice versa is not itself either red or pink; it is not indeed a colour at all; yet it is undoubtedly observed. There is, that is to say, before the mind not only a sensible fact which is called a red colour and is in fact a number of sense data, and a sensible fact which is a pink colour and is similarly analysable, but a third fact which is called the resemblance between them. This fact is not a sense datum and is not, therefore, seen by the eye; all we can say of it is that it is observed. A similar conclusion is reached by an examination of the content of such statements as 'Edinburgh is to the north of London'.

It is, however, in the analysis of the status of such entities as the laws of logic that the necessity for postulating objects which are neither physical nor yet mental is most clearly seen. Many thinkers have held that the laws of logic are laws of mental behaviour, that is to say, they describe the ways in which the mind works. But the mind does not dictate to reality when it holds with regard to it that no one item of it can at the same time be both itself and another item; it merely notices this as a fact. The laws of logic are not prescribed by mind to things; they are grasped by mind as being laws governing the behaviour of things. It is not, that is to say, a mental requirement that a thing cannot both be (A) and not (A); it is a fact about the universe which would have been a fact had the mind never noticed it, and will continue to be a fact when mind ceases to notice it. Thus the laws of logic are given in the real, just as sense data are given; they are data for the activity of thinking just as colour, sight, and sound are data for the activity of sense perception.

Thus we are driven to postulate the presence in the universe of objects which have neither physical nor mental existence, but which are discovered by mind as forming part of the external world. It is customary to say of these objects not that they exist, but that they subsist. Subsistent objects are, I think, what many realists have meant to designate by the term 'concept', although I am not sure that they would attribute to the concept precisely the same status and function as those with which I endow the subsistent object. For me, however, subsistent objects and concepts are identical. I believe that subsistent objects are exceedingly numerous, far more numerous than either physical objects or mental acts. There is a subsistent object for every physical object considered as a set of sense data, and there is also one for each sense datum in the set. Subsistent objects include everything that can be thought of and also all the relations between the things that can be thought of; they include the counterparts of everything that exists, and of everything that may or might have existed but does not.

Whether a thing which can be thought of actually exists, whether, that is to say, there is an existent physical object corresponding to the subsistent object, is an accident expressive of the intractably contingent element in the universe. There appear to be no laws determining whether to any subsistent there should be a physical counterpart; there are no laws, in other words, which will enable you to determine what the physical universe is in fact like.

Rationalist philosophies which claim to determine what the nature of the universe must be, by *a priori* reasoning from premises which are recognized as self-evident, appear to me to err in ignoring this important point. A mathematician in his study could, provided his powers of reasoning were sufficiently great, deduce the whole structure of mathematics from certain fundamental principles. This is because the whole of mathematics follows necessarily from any given part of it. Now if the universe were like a mathematical problem, if, that is to say, it exhibited necessity, and necessity only, then it would be possible for a person knowing any one part to deduce the nature of the rest by process of unassisted reasoning. But if the universe exhibits necessity, it also exhibits contingency as well. There is, in other words, in the universe an intractable irrational element, a something given, alien from and unamenable to reason, the existence and nature of which cannot be deduced or discovered by any kind of philosophic reasoning.

There is, for example, no necessity that a substance possessing the specific gravity of gold should be yellow, nor that at a certain point on the beach at Margate at eleven-thirty a.m. on the seventh March 1926 there should be one white pebble two inches to the north and one inch to the east of one blue pebble. If there were, we might abandon the newspaper for a less reticent Old Moore's Almanac. Nothing can enable us to ascertain facts of this kind except observation, and it is for this reason that rationalist philosophies which seek to deduce the nature of the universe by reasoning alone have tended to despise the given fact, and to stigmatize as illusory appearance whatever they failed to establish by means of unassisted ratiocination.

Even science fails to help us here. Science, it is true, formulates laws which describe the behaviour of the given, and as it advances, succeeds in bringing an ever greater area of the given under the aegis of an ever-diminishing number of laws. As its researches are pushed farther and farther back, what was formerly accepted as brute given is shown to be amenable to law and brought within the scientific fold. But science will never succeed in dispensing with the existence of a something which is presented to its laws, and this something, from the very fact that it is *its consequences* which the law determines, must itself be outside the operations of law. And in saying that it is outside the operations of law, we mean that it is unamenable to and unreachable by the operations of reason at the particular stage which science happens to have reached. Granted that it may subsequently become amenable, yet it can only do so

by giving way to a new something which assumes the role of brute given in its place. As Professor A. E. Taylor puts it:

> We have to appeal in all our experience of the actual not only to 'laws' but to 'collocations'. Science, which hates to accept anything whatever as mere given fact, is always trying, with much success, to reduce the 'collocations' with which it starts as given to mere consequences of 'laws'. Thus it reduces the collocation which appears as brute matter to elements; the collocation of elements to atoms; the collocation of atoms to charges of positive or negative electricity. But every success in such reduction is achieved at the price of acquiescence in some assumption of an earlier and more ultimate 'collocation'. Without 'collocations' which have to be taken as 'brute fact', as there we do not know how or why, the functional dependences we call 'laws' would reduce to functions without any arguments and would thus become as insignificant as the symbol of a ϕ before a blank. Here we clearly come upon an inevitable limit to the whole work of scientific explanation.[1]

Now in discovering what the something is whose consequences scientific laws determine, sense experience alone will avail. Analyse and formularize the universe as we may, there remains a fundamental element of geography which expresses itself in facts of the type, 'the interval between two events X and Y in space-time happens to be A'—facts which are at once contingent and intractable. It is for this contingent element that I am trying to make provision when I assert that the existence or non-existence of the physical counterpart of a subsistent object is purely accidental. No amount of reasoning, whether of a scientific or a philosophical character, will enable us to tell whether the blue dragon in the garden of which I am thinking while I am writing these words is there in actual fact. The only way to find out is to go and see. But the circumstance that the garden has just turned out on inspection to reveal no blue dragons, does not alter the fact that I was most certainly thinking of one as being there, and that, if the reasons given above are valid, what I was thinking of was not a mental figment.

I do not propose to enter upon a detailed treatment of the nature of subsistent objects, and of the place to be assigned to them in the theory of knowledge. The subject will be found fully discussed in Professor W. P. Montague's book, *The Ways of Knowing*, in which a theory of subsistent objects is advanced, to which, with certain unimportant exceptions, I subscribe. A few words will, however, be desirable in explanation of the relationship between subsistent and physical objects,[2] and also of the part played by the

[1] Taylor, 'The Freedom of Man,' *Contemporary British Philosophy*, vol. ii, p. 298.

[2] The term physical objects is of course used in a Pickwickian sense. Actually, as I have tried to show, a physical object is a series of sets of sense data.

former in cases of error. For every physical object there is a subsistent object which is its exact counterpart. In other words, for every table which, as I say, I see, there is a table of which I think. But most subsistent objects, as, for example, sirens and all the different amounts of money which I have not got in my pocket, have no physical counterparts. Subsistent objects may be divided into four classes:

(i) all those which are known and which have physical counterparts which are also known, for example, the sun and the moon;

(ii) those which are known and have or had physical counterparts which are not known, for example, the other side of the moon and the surface of the earth before life appeared upon it;

(iii) those which are known and have no physical counterparts, for example, mermaids, sirens, and hydras;

(iv) those which are not known, for example, numbers which are so large that nobody has ever thought of them, and which may or may not have physical counterparts.

In general we say that the world of subsistent objects is the world of whatever can be thought of and, for all we know to the contrary, of whatever cannot be or at any rate has not been thought of as well. It is the sum total of logically conceivable and logically separable entities. As such it contains within itself the world of physical objects, as the ocean contains its waves. A physical object may therefore be loosely described as the manifestation in the material world of a subsistent object.

When a subsistent object is known, it produces an effect upon the mind that knows it. Thinking of a griffin is obviously different from thinking of a unicorn; it is also different from thinking of nothing. It follows first, that a griffin is something, since, were it nothing, to think of it would be the same as to think of nothing; and secondly, that the griffin when thought of determines or qualifies the act of thinking. This determining effect upon thinking which the subsistent object exercises is called by Professor Montague the 'vicarious efficacy' of the object, and it is obvious that vicarious efficacy can be exercised both by subsistent objects which have no physical counterparts, such as sirens, and by those which though having physical counterparts are related by relations which do not and did not hold between the counterparts, as for example by the subsistent objects involved in the expression, 'Alexander's crossing of the Rubicon.'

Now physical objects also possess vicarious efficacy in the sense

that being aware in perception of a chair is different from being aware of a table; but they also possess a different kind of efficacy, in that they produce effects upon other physical objects. The efficacy of a physical object upon another physical object is termed by Professor Montague its 'real efficacy'. Now subsistent objects do not and cannot produce an effect either upon physical objects or upon other subsistent objects. Subsistent objects may, therefore, be distinguished from physical objects by the fact that while the latter have both real and vicarious efficacy, subsistent objects possess vicarious efficacy only.

William James made the same distinction in another connexion when he affirmed that the only effective way of distinguishing sensation from imagination was by reference to their objects. The objects of sense are, he asserted, to be distinguished from the objects of imagination not by superior intensity or vivacity, but in terms of their different causal effects. What distinguishes the fire you think of from the fire you feel is that the former does not burn sticks and boil water. This difference of causal efficacy between objects perceived and objects imagined constitutes the distinction between sensing things and imagining them.

It is a precisely similar distinction that I am asserting between the objects of thought which have causal effects upon our thinking, and the objects of sense which have causal effects in other directions as well.

A further distinction emerges in connexion with the respective relationships of physical and subsistent objects to the mind. This distinction may be stated as follows. We do not think of a subsistent object until the attention of our minds has been directed upon it by the perception of a physical object which is its counterpart. Thus we do not think of the subsistent object which is St. Paul's Cathedral, until we have either seen it or a representation of it, or heard an account of it. The verbal description of St. Paul's Cathedral is made up of a set of sense data which form part of the whole series of sense data, visual, auditory, and tactile, which, taken together, constitute St. Paul's. The set of sense data which is called a verbal description of St. Paul's has, therefore, as much right to be called an aspect or appearance of St. Paul's as a visual impression of the cathedral, and, as the cathedral itself is the sum total of its appearances, we are entitled to call hearing a description of St. Paul's a perception of St. Paul's.

Now unless some perception of St. Paul's in the sense defined has first taken place, it is not possible to think of it, so that persons who have never seen or heard of St. Paul's cannot know

it as a subsistent object. Similarly the subsistent objects of which we are aware in dreams are all conditioned by the prior appearances to us in our perceptual waking life either of their physical counterparts or of the physical counterparts of subsistent objects which are akin to them. If we had never heard of dragons nor seen representations of them, nor been aware of blue objects, we could not dream of the subsistent objects which are blue dragons. The world of dreams presupposes the world of waking life, but the world of waking life does not presuppose the world of dreams. In this sense, then, thinking of a subsistent object is dependent upon and conditioned by a prior perceptual awareness of physical objects.

An illustration of this truth is afforded by the stages through which the infant mind passes in the process of apprehending propositions about mathematical objects and the relations between them. In learning the truth of such a proposition as that two and two make four, the child is first encouraged to experiment with physical objects. He counts apples into pairs, and is then required to notice that any two apples and any other two apples make four apples. The next stage is the realization that what he sees to be a true proposition about the apples which he has counted is also a true proposition about apples which he has not counted. From apples which he has not counted to apples which he has never seen, and from apples which he has never seen to objects of all kinds both seen and unseen, are stages in the advance to the apprehension of the truth of the general proposition that two and two make four, a proposition which, when once grasped, is seen to be independent of the particular instances which have led to the apprehension of it. Once, moreover, the truth of this general proposition has been grasped, the realization that it is not only true, but would remain true even if there were no concrete physical objects to make the pairs, follows, except in the minds of certain philosophers whose theories require them to doubt it. The conclusion is that mathematical propositions which are propositions about the relationships between subsistent objects, while independent of physical objects for their being true, are nevertheless dependent in the first instance upon the existence of such objects for the recognition of their truth by mind. The truth of propositions about mathematical objects and about all subsistent objects would be unaffected by the complete abolition of the physical world, because they are not propositions about the physical world; but it is nevertheless upon the existence of such a world that, in the first instance, the apprehension of their truth by mind depends.

Speaking generally, we may say that the apprehension by mind of subsistent objects and of the relationships between them comes at a later stage than the perception of physical objects, is rendered possible only after the perceptual stage has been reached, and emerges only at a comparatively advanced stage of mental development. It is only in and through contact with matter that new levels of mental development are enabled to emerge,[1] and from this point of view mathematics is of peculiar interest in affording a striking example of the part played by matter in turning the mind in the direction of the non-material.

A few words must be added with regard to the part played by subsistent objects in false belief.[2] All beliefs are beliefs about something, and the object of a belief, that which is believed, is not, for reasons already given, a mental existent. It follows that there are objects of false belief just as there are objects of true belief. What is believed in each case is a proposition, the content of the proposition being the subsistent object or objects, about which the proposition asserts something.[3]

In the second place it seems to be clear that the fact that a proposition is believed has no relevance to the truth of the proposition. The intensity with which a belief is entertained is also irrelevant to its truth. Most people believed for centuries that the earth was flat, but the existence of this belief and its subsequent supersession by a contrary belief did not in any sense either guarantee or detract from the truth of the proposition, 'the earth is flat.' Thirdly, the content of a proposition is presupposed and determined by its opposite, just as the convex aspect of a surface is presupposed and determined by the concave. The proposition 'snow is white' is the opposite of the contrary false proposition 'snow is not white', and, were the contrary proposition not false, the original proposition would not be true. If, therefore, the proposition 'snow is white' is objective and asserts, as it is generally agreed it does, an objective fact, the false proposition 'snow is not white' must be objective and must assert an objective fact, since, if we were to say of the latter that it was subjective and merely affirmed the existence of a mental hallucination, we should be committed to the untenable position that the truth of a proposition which asserts an objective fact is determined by the existence of a subjective mental hallucination. The following classes of case arise:

[1] See Ch. IV, pp. 170–6.

[2] See appendix at end of chapter for a formal statement of the theory of Truth and Error.

[3] Cp. Moore, *Mind*, vol. viii, N.S., p. 179, 'The Nature of Judgement': 'A proposition is composed not of words nor yet of thoughts, but of concepts.'

(1) Where the proposition asserts a relationship between two subsistent objects. In cases of this class a true belief will be a belief in a proposition which asserts a relationship between subsistent objects such that, where these subsistent objects have physical counterparts, the relationship in question holds or once held between the counterparts. Thus, if we believe that Caesar crossed the Rubicon, the relationship asserted did hold between the physical counterpart of the subsistent object which is Caesar, and the physical object which is the counterpart of the subsistent object, the Rubicon; and the belief is, therefore, true. If we believe that Alexander crossed the Rubicon, the belief is false, since no relationship of the kind in question holds or ever held between the physical counterparts of Alexander and the Rubicon.

Similarly the proposition, the number eighteen is greater than the number ten, is true because the relationship of 'greater than' does hold between the physical counterparts of the subsistent object eighteen and the physical counterparts of the subsistent object ten, that is to say, between collections of eighteen physical objects and collections of ten physical objects.

(2) Where the proposition makes an assertion about the qualities of a subsistent object, the belief will be true, if the physical counterpart of the subsistent object, which forms the content of the proposition, does possess the quality or qualities asserted. Thus in the case of the proposition, 'the grass is green', there is a subsistent object, namely, grass, of which there is a physical counterpart to which the property of being green belongs. In the case of the proposition 'the earth is flat', the content of the proposition is a subsistent object to the physical counterpart of which, namely, the earth, the property of being flat does not belong, and the proposition is false. Another way of putting this is to say that there is in the realm of existents no object to which the property of being the earth and the property of being flat both belong.

(3) If a subsistent object has no physical counterpart, all self-consistent propositions with regard to it are true, except those which ascribe existence to it or imply that it exists. It should, however, be pointed out that although some subsistent objects have no physical counterparts, in the sense in which the subsistent object table has a counterpart, there may nevertheless be physical existents which serve as their counterparts. That sirens and unicorns are not to be found in the realm of physical existents is of course a fact. At the same time there are numerous pictorial representations of both, which perform the function of physical counterparts for the purpose of determining the truth or falsehood

of propositions in which the words 'siren' and 'unicorn' occur. Thus in considering the truth or falsehood of the proposition, a siren is different from a unicorn, the question we have to ask is, whether there is a pictorial representation of a siren to which there belongs the property of being different from a pictorial representation of a unicorn. The answer to this question is in the affirmative, and the proposition is therefore true. It is at least possible that all the true propositions that have actually been asserted about subsisten objects involve and depend for their truth upon the existence of entities which *serve as* physical counterparts of the subsistent objects, even if the objects in question are such as would commonly be called mythical.

In general it may be pointed out that to maintain the view that the function of the mind in belief is limited to awareness, it is necessary to hold that the proposition in which belief is entertained always asserts a relation between subsistent objects, of which the mind is aware. If the relationship in question also holds between the physical counterparts of the subsistent objects, then the belief is true; if not, it is false. In other words, it is at least possible that all subsistent objects about which, or about the relations between which, true propositions have been asserted, are not instances of case (3) at all; that whenever we make a true statement about a subsistent object, we only do so because we have at some time or other been aware of a physical existent which is or has served as a counterpart of the object in question. I do not positively assert that this is so, but it seems to me to be at least possible that it is so. And I think that this may be so, because it seems to me to be, at least, possible that we never think of subsistent objects that have not now or have not had in the past (as in the case of historical objects) physical counterparts which have, as it were, drawn our attention to their subsistent prototypes.

The important points are: (i) that the proposition believed in, whether true or false, always asserts something, and that this something, being a relationship between subsistent objects, is a fact and is a constituent of reality. (ii) The relationships asserted by the propositions which constitute the objects of belief are not relationships between physical objects. (iii) What makes a belief true is nevertheless the existence of a certain relationship between objects which are the physical counterparts of the subsistent objects which form the content of the proposition believed in, namely, the relationship which is asserted to hold between the subsistent objects; this relationship is itself a subsistent object.

The question what subsistent objects have physical counterparts

and what are the relations between them cannot be answered by process of reasoning. It resolves itself ultimately into a question of cosmic geography, the question, namely, of what there is in the physical universe, and can, therefore, only be determined by observation.

Conclusion.

Assuming the necessity for the dualism of mind and matter, in favour of which I have argued in the preceding pages, I have tried in this chapter to describe that form of the relationship between them which occurs in the activities of knowledge and of perception. I have tried to define this relationship in such a way that the role assigned to mind may be single and uniform throughout. Whether in perception, imagination, memory, or thinking, the function of mind, I have urged, is that of simple awareness of something other than itself.

If I am right in supposing that all mental activity is of this type, and of this type only, it is clear that this simple awareness cannot be further defined. I envisage it, however, not as a passive receptivity by mind of objects impinging upon it from without, but as a form of dynamic activity which can and does extend the bounds of its operation. It is not only a being aware, but a looking or seeking for the things of which to be aware.

The theory that there are no thoughts but only thinkings, and that mind as a consequence is always an activity and never a state, is not only in harmony with but is necessitated by the view of life as an active dynamic force which I have suggested above. If the nature of life is to be a pulse or thrust, we cannot expect it to exhibit the characteristics of a thing which may be impelled or thrusted. If mind is always activity as subject, it cannot crystallize into a state which can be considered as object. Now thoughts and ideas, images and mental contents, are all of them of the nature of objects rather than of subjects. They are little pools or crystallizations of mind stuff which can be entertained by mind in thinking and contemplated as its objects.

For this reason it is important for a vitalistic theory of knowledge to transfer to the external world all the variety and complexity of what is commonly called mental content. Instead of regarding this variety and complexity as characterizing the world of mind, we shall treat it as belonging to the objective, external world, mind itself, in so far as its activity takes the form of perception, being merely the awareness of the collection of objects which at any given moment are heaped, as it were, at the centre

or node at which mental activity is functioning. Mind, in short, is a centre of energy, exhibiting awareness over a field.

In order to maintain this position it is necessary to regard the real as presented in perception as sense data, and to dispense with the notion of a physical object underlying the sense data. An analysis on these lines accounts for the phenomenon of differing perceptions of the same 'object', without having recourse to the introduction of psychological factors in the minds of the perceivers to explain the differences. It is also necessary to regard the mind in thought as being directly aware of subsistent objects which are neither physical nor mental, and which have no place in the spatio-temporal system. It is this last hypothesis, bringing, as it must bring, in its train an innumerable host of subsistent entities, some with and some without physical counterparts, to which objection is most commonly taken. I think, however, that this objection turns out on analysis to be of an aesthetic or emotional rather than of a strictly logical character. This multiplication of subsistent reals savours of an extravagance which may well offend the rigorous economy of those who are accustomed to wield Occam's razor. Yet the lack of economy is more apparent than real. Whatever view we take of the problem of knowledge, we are committed to this host of entities, and the process of transferring them from the mental to the non-mental world does not really increase their sum. The number of what, on any ordinary view, are called erroneous thoughts is infinite. Every time a schoolboy does a sum wrong or holds that Alexander crossed the Rubicon, every time that we mistake the time of a train, or wrongly calculate a time or a distance, additions are made on this view to the sum total of false beliefs. Each of these false beliefs is, on the ordinary view, a mental entity, and as such is real and a constituent of the real. To say that the false belief is a belief in the existence of a non-existent physical counterpart of a subsistent object does not make matters worse, so far as numbers go, even if it does not mend them. Proceeding on the basis of, say, an idealist analysis of knowledge, we find ourselves committed to an infinite number of thoughts; to substitute the thinking about an infinite number of subsistent objects is to call the contents of the universe by another name, and to attribute to them a different status, rather than to increase their sum.

Even if we concede that the infinity of mental existents implied by the ordinary view is somehow less 'crowding' than an infinity of subsistent objects, we seem, nevertheless, committed, whatever line we take, to an infinity of existents. Between any two

points there is an infinity of other points; the sum of numbers of which no mind has ever thought is infinite, and infinite, too, is the number of relations between each one of these numbers and every other number. Unless we are to adopt an extreme idealist position and to assert that numbers and points are mental constructions and not constituents of the external real, we cannot avoid indefinitely populating our universe with non-physical entities which are nevertheless real, while, if we do take the idealist view and regard numbers as mental affections, our universe, which will now be mental through and through, will be no less crowded than before.

I conclude that we are committed to an infinite multiplication of entities whatever view we take, and have less hesitation, therefore, in putting forward a theory which consigns this infinity of reals to the realm of subsistent objects. The objection to the 'crowding' of the universe with unwanted reals is in any event only valid upon the assumption of an unwarrantable spatial metaphor. Subsistent objects do not occupy space, and the term 'crowding' or even 'multiplication' is irrelevant when applied to a theory which invokes them. If, however, 'crowding' is a drawback, then, it is one which, I contend, applies to other theories equally with my own.

APPENDIX TO CHAPTER III

THE FORMAL THEORY OF TRUTH AND ERROR

THERE is no such thing as 'truth' as a substantive, except in the sense in which truth is a subsistent object. 'True' is an adjective which attaches to propositions; propositions are true or false.

What is thought true has no relevance to the question of what is true; for example, the belief that the earth is flat, which was universally held, had no bearing upon the shape of the earth, nor had the abandonment of that belief. The truth of a true proposition, and the falsity of a false proposition are, therefore, independent of belief.

All propositions assert relations between entities variously known as concepts, subsistent objects, and objects of thought. These objects and the relations asserted between them form the content of the proposition which asserts the relations. If the same relation as that asserted holds between the physical counterparts of these objects of thought, or would hold between them, if there were physical counterparts, then the proposition is true and may be said to assert a fact.

When I believe something, the object of my belief is a proposition which asserts a relation between objects of thought, both the objects and the relations being independent of, but directly apprehended by, my mind. I do not, therefore, believe or assert anything about my own mental states. One of the objects of thought is the object, *existence*. Therefore the proposition 'man exists' means that the subsistent object, man, and the subsistent object, existence, stand to one another in a specific relationship. The nature and contents of the physical world may thus be defined in terms of the number and character of the subsistent objects which stand in this particular relationship to the subsistent object, existence. This is merely another way of saying that the world of existents is made up of the physical counterparts of subsistent objects.

A false proposition is one which asserts a relation between subsistent objects which does not hold between the physical counterparts of those objects. In other words, the connexion between the concepts asserted by the proposition is not to be found among existents. Every object of thought has every possible relation with every other object of thought, but it is only some of these relations which are to be found in the world of existents, just as it is only some objects of thought which have physical

counterparts. What we mean, then, by calling a proposition true is that it asserts a relation between objects of thought which happens also to hold between their counterparts in the physical world.

The truth of a proposition is not an intrinsic property of the proposition, and there is no intrinsic difference between a true proposition and a false one. It follows that there is no means of verifying the truth of a proposition except by direct inspection of the physical objects which are the counterparts of the subsistent objects which form the content of the proposition. Whether there are physical objects which have the relationship which is asserted by the proposition can only be discovered in the course of immediate sense experience. If there are such objects, and they do have the relationship in question, the relationship can be directly recognized upon inspection.

Since truth is not an intrinsic property of propositions or indeed of anything else, it follows that it cannot be defined. All that we can do is to recognize by immediate experience what propositions are true. It also follows that there is no formal criterion of truth such that, if the criterion applies, then the proposition which satisfies it is true. The impossibility of defining truth follows from the fact that, if truth were defined, as being, for example, some property of a relationship between an object and my mental states, or of my mental states, then the proposition by which it was so defined must itself be true. But the truth of this proposition cannot itself be defined in terms of this relation, since such definition would involve a vicious circle.

On the above lines it is possible (1) to maintain that the relationship of mind to objects is always the same, namely, a relationship of direct awareness; (2) that objects of illusory experience, as, for example, objects of thought such as sirens and unicorns, which have no physical counterparts, are real, and are not dependent states of the thinker's mind. This is important because if these particular objects can be defined as mental existents dependent on mind, then all objects may, for all we know to the contrary, be similarly dependent, that is to say, the mind will be shut up within the closed circle of its own created world.

CHAPTER IV

THE VITALIST HYPOTHESIS

I. PRELIMINARY SKETCH OF POSITION.

IN the two preceding chapters I have been engaged in the task of laying the foundations upon which a metaphysic might be based. The main outlines of the structure which it is proposed to raise will already have been indicated by the discussions of the preceding chapters. I have tried to show that the facts of nature and experience cannot be accounted for in terms of a fundamental unity, from which, by some unexplained process, all the richness and variety of the world around and within us must be regarded as having evolved; that, as a corollary we are committed to the view that there are at least two fundamentally irreducible principles in the universe, from whose interaction some of these phenomena result; and that one set of these phenomena, namely, those exhibited by what is called mental activity, are to be interpreted as life's awareness of something other than and external to itself.

These outlines I now propose to develop in a short essay in constructive speculation, enlarging at greater length upon points of importance in succeeding pages.

I will assume that the material universe was at first a chaos without form or order; a universe devoid of life and mind, subject to the laws of physics and to these alone in respect of its constituents; a universe in all respects such as the nineteenth-century materialists conceived.[1] In this universe, at some point of time which it is impossible to determine—we may, if we choose, regard it as *in some form or other* present from the first[2]—there appears a principle of life. Of this principle in its first expression we can say very little, except that it is not material, and is not, therefore, subject to the laws of physics. Like Schopenhauer's Will, it is at first a mere

[1] Except, of course, that matter will be defined according to the formula most fashionable in twentieth-century physics at the moment. It may be as well here to make the point that the particular analysis of matter which is adopted is irrelevant to the issue with which I am concerned. That twentieth-century matter is no longer the hard, solid something extended in space upon which the materialist can base his irrefragable convictions, is common knowledge. But to affirm that it is a series of point-instants, a hump in space-time, a collection of charges of positive and negative electricity, does not affect its materiality. Even if it is reduced to a series of formulae, it is to be presumed that the formulae mean something. And, if they mean something, the argument applies to exactly what it is that they do mean.

[2] See pp. 179, 180, and Ch. IX, pp. 375–8, for a discussion of these alternatives.

blind thrust or impulsion, a stream of energy pulsing and thrusting in an infinite variety of directions.

'In the lowest forms of life we have seen Will appearing as a blind impulse, a dumb and mysterious effort far from any direct consciousness. It is the simplest and weakest of its objectivations'. Thus Schopenhauer, who goes on to say that the Will 'is manifest as a blind impulse and an unconscious effort in all inorganic nature and in all the primary forces whose laws it is the task of physics and chemistry to seek out'.

Here, however, I part company. Unlike Schopenhauer's Will, the principle of life, as I conceive it, is not the ground and origin of all that is, even if it is present in some form in all that is. It is not, for example, the principle which operates in the world of physics; it is not the force of life that makes the earth turn on its axis, or the tides ebb and flow. On the contrary, life is in a sense opposed to the world of matter, and finding itself set in a material environment, begins unconsciously to struggle to overcome the limitations which this imposes. Moved by an instinctive impulse it surges against the matter of which it finds the physical universe composed, and, like water dashing against a rock, disperses into an infinite multiplicity of units. But, though we find in water our metaphor of dispersal, it is on the analogy of wireless waves or of a current of electricity that we must conceive the intrusion by life into the matter that invests it. Still using the language of metaphor we may say that life enters into matter, animates it and gives form and shape to its material setting. Every separate vital unit constituted in this way, the monkey as well as the man, the plant as well as the philosopher, is a living organism; each is an objectivation of the force of life at a different level. As evolution progresses, life objectifies itself at continually higher[1] levels, each stage of vital development as manifested by living organisms being in advance of the preceding stage.

From this point onwards it will be convenient to give separate treatment to particular questions.

(1) *The relation between life and body.*

What, it may be asked, is the mode of the relationship between the force of life and the material setting in which it is embodied? To this question it seems impossible to give a completely satisfactory answer. It constitutes the fundamental difficulty of all forms of dualism, and I admit at the outset that it is a difficulty

[1] The sense in which the word 'higher' is used in this connexion is defined on pp. 146, 147.

which there seems no immediate prospect of solving. As pointed out in the preceding chapter the difficulty is simply that of conceiving the possibility of interaction between the material and the non-material. It is our very inability to do this that forces us to cut the Gordian knot, by roundly if tentatively defining life as that which while not itself material, possesses the capacity to enter into relationship with the material.

As I shall try to show later in the chapter, we do not know what life is, but only know what it does. We are, therefore, at liberty to define it in any way we please which is consistent with its known behaviour. I do not wish to stress this definition, which only too obviously lacks substance; but I do wish to emphasize the point that, if our analysis of reality as we know it definitely precludes a monistic interpretation, and drives us as a consequence to introduce at least two distinct entities as a condition of finding our universe workable, then we have no alternative but to postulate some sort of relationship between them, even if the precise character of that relationship is something that we cannot envisage. It is obvious that life interacts with matter; it follows that, however we define life, our definition must be of such a kind as to be compatible with, if not actually to embrace, this fundamental vital characteristic.

It is difficult in writing on this question to avoid a certain crude anthropomorphism of expression which, unless careful disclaimers are from time to time introduced, must be misleading. I make such a disclaimer now by protesting earnestly against such an interpretation of my phraseology, as is suggested by the analogy of a mould or vessel into which a liquid or essence is introduced. I do not mean to affirm that there is or ever was a lump of brute matter and that life was somehow smuggled into it to make a living organism, with the result that, when we come to consider the organism as a composite whole, we can affirm of one part that it is matter and of another that it is life. Life is not a little pool located in some special corner of the organism, for instance in the brain or the heart, or an essence circulating in the blood or the breath, this pool or essence being regarded as in some sense the cause of the livingness of the rest of the body. Life permeates the whole structure in such a way that every material particle of a living organism is not only alive but is equally alive. This does not mean, however, that we should be justified in speaking of a part of the body (or of the body itself) as of something which has life, since such language would carry with it the suggestion that the part of the body which has life was itself something other than life, life being somehow added on

to it. But of no part of the body is it possible to affirm that it is or was something which, being in itself purely material, that is to say other than life, came to be invigorated or animated by something vital.[1] Just as when you strip away the various qualities which an object may be observed to possess in the hope of discovering the material something which, as we say, possesses the qualities your hope is doomed to disappointment, since, whatever substratum may be temporarily marked down as the object of your quest is itself found to be only recognizable in virtue of its qualities; so the attempt to strip away the life which animates matter in order to lay bare the brute matter which possesses it, can only lead to the conclusion that living matter being instinct with life through and through, is logically inseparable from the life which qualifies it. Just as there is no substratum which possesses qualities but is itself other than they, so, strictly, there is no such thing as an organism which possesses life but is itself other than life.

It follows that living matter is of necessity different *as matter* from matter which is not living, since besides its ordinary material attributes in virtue of which it obeys the laws of physics, it possesses also the attribute of livingness which can no more be separated from it than its weight or its shape.

In laying emphasis on the inalienable livingness of each separate molecule or particle of the material organism, we are merely making use for our own purposes of a conception which appears to be increasingly prevalent in modern psychology, namely, the conception of the human organism as a combination of living elements, both bodily and mental, all of which co-operate together for the good of the organism, but each of which retains some measure of vital initiative in virtue of which it may pursue courses different from and even antagonistic to those of the whole. This conception of the independent action of different living units in the body is sufficiently familiar in connexion with the behaviour of the phagocytes or white corpuscles in the blood. These co-operate with the rest of the organism in surrounding and digesting intruding bacteria; but the co-operation is not automatic or inevitable, but is one of voluntary and independent units, each of which, in Professor Graham Wallas's words, 'hunts and digests nearly as independently as if it were an isolated inhabitant of a warm tropical sea'.

A man's hair co-operates with the rest of his organism by protecting his brain from blows and from sudden changes of temperature, but it

[1] It may be justifiable to conceive the *first* appearance of life in the material universe on these lines. See p. 179.

may go on growing though the man has ceased to live. His epithelial cells may begin at any moment to proliferate independently, and so cause death by cancer. Red blood corpuscles, or patches of skin transfused from one man to another, may both continue their own activities and also co-operate in the wider functions of the new organism of which they are now parts.[1]

This conception of the body as a complex of co-operating vital parts illustrates and reinforces the metaphysical notion which I have been trying to put forward, of a force or stream of life which is immanent in each and every part. Each cell of the body, each activity of the mind is driven by an impulse which is life itself, and the evolution of the individual may be regarded as the process by which, while the number and complexity of the various parts are increased, their dovetailing and integration are accomplished with ever increasing success. 'The aim of the evolutionary development of the nervous system', writes Sir Henry Head, 'is so to integrate its diverse and contradictory reactions, as to produce a coherent result adapted to the welfare of the organism as a whole.'[2]

The body, then, is instinct with life through and through; it is life objectified in matter, but objectified in such a way that changes in the one are necessarily bound up with and conditioned by changes in the other. It is for this reason that every advance in life, as I shall have in later pages to insist, is accompanied by a corresponding change in the matter which we regard as living, a change which can be best explained in terms of increased complexity and sensitiveness of response. Not only does the immanence of life differentiate living matter considered as matter from non-living matter, but life at each stage of its development is relative to and in part conditioned by a different grade of living matter.

This leads us to a further suggestion arising from the same basic conception, namely, that what is true of the self considered physiologically, is true also of the self considered psychologically. Assuming for the moment a provisional distinction at the commonsense level between thought and feeling, we shall, in pursuance of the same line of argument, be prepared to endow each faculty, in so far as we can conceive of them as separate faculties at all, with its own quality of livingness, a quality which in the sphere of psychology manifests itself as the power of spontaneous initiative. The point is important since many, if not most writers on psychology attribute this power of initiative to one part of our nature

[1] Wallas, *The Art of Thought*, p. 37.
[2] Sir Henry Head, *Proceedings of the Seventh International Congress of Psychology*, p. 180.

only, namely, the instinctive. For them it is instinct that initiates action and generates thought. The reason on this view is a piece of mechanism, whose function is confined to planning the steps that are necessary to achieve the ends to which instinct unconsciously prompts, or that desire has consciously conceived. In fulfilment of this function reason invents justifications for what we instinctively want to do and arguments for what we instinctively want to believe. Reason, in short, is an engine and instinct the steam which sets it going; without instinct reason cannot move. This view of the relation of instinct and reason, of feeling and thought, may, I think, be regarded as the orthodox view in psychology. Professor MacDougall states it clearly when he says, 'The instincts are the prime movers of all human activity; by the conative or impulsive force of some instinct, every train of thought, however cold and passionless it may seem, is borne along towards its end'.[1]

I do not propose to enter into the arguments for and against this view, a proceeding that would involve a more detailed discussion of current psychological theory than would be appropriate in a book of this kind. I mention it here to throw into relief the contrary view to which my hypothesis of the immanence of life not only in every particle of the individual's body, but in every phase and faculty of his psychology, points the way, the view, namely, that thought and feeling possess each in its own right the power to initiate and to create, a power that, both in thought and feeling, proceeds from a *hormé* or impulse which is life itself.

Admitting that the road to thought leads normally by way of perception of an external situation, of feeling in regard to the situation perceived, and of conation issuing in action, with the brain functioning at the end of the process to plan the steps necessary for the accomplishment of our conative desires, I shall, nevertheless, insist on the independent power of the cortex of the upper brain working on its own initiative to satisfy its own need of activity, or, translating into psychological terms, on the capacity of our minds to think without the preceding stimulus of sensory experience.[2] And this conclusion, for which there is a substantial and growing quantity of empirical evidence, will follow logically from my view that, since every particle of the bodily organism is instinct and, it may be, equally instinct with life, since too the quality of livingness in matter endows it with the capacity for

[1] MacDougall, *Outline of Psychology*, p. 218.

[2] Cp. Wallas, *The Art of Thought*, p. 42: 'And just as the upper brain may start its activity without the stimulus of a sensation or an "instinctive impulse", so it may conclude its activity without having produced that muscular movement which concludes the primitive cycle of "psychological" events.'

spontaneous action, there is no more ground for attributing this capacity to one part of our being, whether psychological or physiological, than to another.

The point is important for two reasons. First, I advocated in the last chapter a view of mind which credits it with the capacity to know subsistent objects; since these objects do not impinge upon the senses, it is clear that no sensory stimulus could in such cases be the origin or condition of thought. Secondly, it is part of my thesis, as I shall try in later pages to show, that the object of evolution is such a development and enrichment of life as will enable it to contemplate directly a reality which is at present known to us but rarely in intermittent flashes of mystical insight. This vision of the real, which will be attained, if attained it ever is, only in a late stage of vital development, will involve a direct awareness by mind of non-sensible objects. This direct awareness could not take place if the mind could only function as the result of a preceding sensory stimulus. But this is to anticipate, and I return to the preliminary sketch of my position.

(2) *The purpose of life.*

The next question that suggests itself is the meaning which is to be attached to expressions such as 'the progress of evolution' and 'higher levels and stages of vital development', of which I have already made use. Development, for example, implies advance, advance implies direction, and direction implies goal. The word 'higher' too is meaningless unless we assume the existence of an objective standard in terms of which the advance of life may be measured. What then is the standard by reference to which we may say that life progresses? What is the goal at which it may be said to be aiming, and in what sense is it aware of this goal? Let me take the second point first.

Just as all organic matter is instinct with life, so that we cannot say of one part of our bodies 'here the life force is', and of another part 'here it is not', so all life is by its very nature purposive. This does not mean that life is at all times and stages of its development purposive in the same sense and in the same degree, still less that it is consciously so. On the contrary, what we may call the advance of life is definable in terms of an increasing consciousness of purpose, as well as of a change in the purpose of which there is consciousness. Not only as life advances are there change and development in the purpose which it is seeking to fulfil, but there is advance also in the knowledge of that purpose.

All that I mean by calling life in its initial stages purposive, is

that all life, just because it is life, is necessarily moved to transcend itself. In regard to mind Professor MacDougall says, 'All mental life is purposive; and the higher forms of mental activity differ from the lower, not in that purpose is added to them, but rather in that in the higher forms the goal is clearly defined in consciousness, while in the lower it remains obscure and vague.' 'Purposiveness . . .', he concludes, 'seems to be of the essence of mental activity', and adds, 'There is no obvious lower limit to the scale of purposiveness'.[1] What is true of life as mental is equally true of life in general; the distinction within life, between what is mind and what is not, being an unreal one. Mind at any moment, together with the other faculties or aspects of life which psychology studies, such as feeling or impulse, is simply a particular level at which life has emerged; as such it is not separated from other levels by a distinction in kind, but shades into them by imperceptibly minute degrees.[2] It is only in thought and for the purposes of thought that we usually distinguish as faculties what are merely different aspects of one continuous stream of life, a false hypostatization which has vitiated much of our psychology. It is a merit in the present hypothesis that it makes no overtures to the watertight-compartment psychology. Life, it maintains, is fundamentally the same at any given moment in all its manifestations; and it is just because all the aspects which life presents are merely different manifestations or expressions of what is fundamentally a continuous stream, that this hypothesis refuses to endow any one aspect of life at a particular level with powers and capacities that it denies to another aspect at the same level, but affirms, for example, as I have just affirmed, that if sensation and feeling are spontaneous and have power to move the organism as a whole, then thought must be credited with the same capacity.

We cannot, therefore, admit in respect of one aspect of life an explanation of activity which we should disavow in relation to another. We cannot, that is to say, affirm of mind that it is purposive and capable of activity in the pursuit of a goal perceived or imagined, but not yet realized, but assert of instinct, appetite, or feeling that they are mechanical and determined, being called into action in response to stimuli operating from behind, but incapable of spontaneous action in the effort to achieve an end, pursue a goal, or fulfil a purpose. Yet this is precisely what we must assert of instinct, unless we are prepared to admit that it,

[1] McDougall, *An Outline of Psychology*, pp. 48, 49.
[2] Cp. McDougall: 'Instinct and Intelligence are not two diverse principles of action or of guidance of action.' Ibid., p. 92.

too, is not blind but purposive. Whatever interpretation, then, we give to the activity of life in its later developed stages, must apply also to its earlier; if life, as it appears in mind, its highest emergent, is found to be purposive, then it must be purposive also in its lowest and earliest manifestation in mosses and lichens.

If life be purposive, how are we to describe its purpose? As a preliminary and purely formal description we may say that each level at which life is manifested has for its purpose the achievement of the next level. Just as in Professor Alexander's metaphysic each successive emergent of Space-Time occupies, while yet unrealized, the position of deity in respect of the realized emergent that precedes it, so, if we are prepared to rest content with the conception of a life force whose *raison d'être* it is to evolve, and by evolving continually to transcend itself, we may affirm of each level of evolution actually achieved that its achievement was the purpose of the stage that went before it. On this assumption the purpose of life is a continually changing one. Changing, too, is the degree of awareness or conception of purpose with which each level of life may be supposed to be endowed. Originally a mere blind thrust or drive like the Schopenhauerian Will, life not only evolves higher levels of itself, but achieves at each successive level an increased awareness of its own nature, which takes the form of a growing realization both of the fact and of the purpose of its evolution. In other words, its purpose, though always latent in the sense that its behaviour even at the earliest stage can ultimately find adequate interpretation only in terms of purpose, rises from unconsciousness to consciousness as evolution progresses, becoming definite and explicit only when the level of what is called mind is reached.

But to say that an evolving force of life rises above its current manifestations to ever higher levels of consciousness including consciousness of purpose, does not carry us very far. Can we not give some meaning to these levels, in virtue of which the conception of life as something which progresses as it evolves may receive content and significance in relation to something other than life itself?

The direction in which we must look for such external significance has already been indicated by the discussion of the last chapter. Knowledge was there shown to be interpretable in terms of life's direct awareness of something other than itself. Mind was not a thing with a content; it was an active, continuously changing energy, engaged in looking and discovering, a searchlight which lit up the external world, and, in so doing, became aware of what it contained. To put the point in its most general aspect, life's

activity was found to be definable in terms of its awareness of objects external to itself. When these objects belonged to the physical world I called life's awareness of them sensory experience; when they were subsistent objects, I called life's awareness of them thinking. Life when engaged in the activity of thinking is known as mind, which is thus the name for a grade of vital activity. This activity is the highest in which life has yet succeeded in continuously expressing itself. Mind, therefore, is not different in kind from the expressions of life at other levels.

It follows that at other levels of expression also, the activity of life will still be interpretable in terms of awareness, the difference between one level and another being a difference, not between vital entities, nor between the contents of vital streams, but between the kinds of objects of which at each level life is aware. When, therefore, I say that the purpose of life is to rise to higher levels of development, to achieve a richer consciousness or an increased power of intellect, the terms which I employ are to be interpreted as signifying a continually increasing scope and depth of awareness, in virtue of which life becomes cognizant of an ever wider and deeper reality. Thus the phrase 'higher' activities of life means simply a wider awareness on the part of life, and the effort of life to transcend itself is to be conceived as the effort to discover and contemplate more and more of what the universe contains. Life is no passive awareness; it is an active seeking of objects of which to be aware.[1]

(3) *Evolution as progress in awareness.*

Let us see how this conception works out in detail. My analysis of the knowledge relationship has issued in the conclusion that knowledge is a mental awareness of external entities and events; the theory of the continuity of all vital activities suggests that what is true of knowledge is true also of such psychological phenomena as the emotions and the appetites; these also will be analysable into forms of awareness.

Without trespassing too far upon the preserves of the botanist or the zoologist, let us consider the forms which this expression of vital activity as awareness takes in plants and animals. Not, indeed, that there is any necessity to begin with plants. I hope

[1] Cp. Hobbes's description of regulated thought in the *Leviathan*: 'Sometimes a man seeks what he has lost. . . . Sometimes a man knows a place determinate, within the compass whereof he is to seek; and then his thoughts run over all the parts thereof, in the same manner as one would sweep a room to find a jewel; or as a spaniel ranges a field, till he find a scent; or as a man should run over the alphabet to start a rhyme.'

that I have not seemed to suggest that the view advocated in this book is one which asserts that purely inanimate matter exists at any rate on this planet here and now.[1] Because my theory is a dualistic one, because I hold that every living organism is a compound of two principles neither of which is resolvable into the other, I am not, therefore, committed to the view that there is as a matter of actual physical fact any entity which is exclusively an embodiment of that principle of obstruction which I have identified with matter. It may well be that every entity in the physical world as we know it is instinct with life; but it is life at different stages of development, some of which are much more rudimentary than others. Sir J. C. Bose has shown that plants breathe and have hearts, that they can be stimulated and anaesthetized, can feel pleasure and die in agony. His earlier researches on metals show that they, too, respond to stimuli, are subject to fatigue, and react to poison very much as so-called living organisms do.

Samuel Butler pointed out in the course of a satirical advocacy of vegetarianism that it is impossible to draw the line between the living and the non-living, to show where the living begins and the non-living ends,[2] and the scientists, as we saw in Chapter I, agree with Butler. Nor is this conclusion one which on my premises I should have difficulty in accepting. Life exists; even the strictest physicists are increasingly constrained to admit the fact. As regards some part of the world of our experience, it would, I think, be generally conceded that we cannot explain what happens on the assumption that matter and the forms of matter are the only existents. How, then, does life come to appear? Briefly there are two answers to this question: the first, that it was at a given moment of time suddenly smuggled into the universe from outside; the second, that some form of life, albeit unconscious, was present from the first in all the particles of matter, and from being latent gradually expressed itself by process of emergence in forms which became increasingly more conscious and more complicated. Between these two answers it is impossible to pronounce with certainty.[3] But it may well be that, even if there was a period when lifeless matter existed, all the matter on this planet at any rate is in some degree living *now*. This is not to say that everything is life, but only that everything is living in respect of some portion of its total make-up. This conclusion, I affirm, is incon-

[1] See Chap. I, pp. 22, 23, for a repudiation of this suggestion.
[2] Butler, *Erewhon*, Chap. XXVI, 'The Views of an Erewhonian Prophet concerning the rights of animals'.
[3] See p. 179 of this chapter, and Chap. IX, pp. 376, 377, for a preference for the former.

sistent neither with the contention that life is radically distinct from matter, nor with the view, which I shall proceed to develop, that the progress and development of life are to be interpreted in terms of a growing scope of awareness. As life develops, it sees more of the external world, and it penetrates more deeply into what it sees. The fact, then, that I begin my account of the meaning I assign to the term 'scope of awareness' with flowers, should not be taken to imply that flowers are the lowest form of life. Metals are conceivably lower, but we do not know even in the most rudimentary way what the life of a metal is like. Therefore I have begun with the life of a plant, of which, thanks to Sir J. C. Bose, we have some little knowledge.

Invoking and adapting the James-Lange theory of the emotions, I shall regard the feeling of need or want as being an awareness by the organism of physiological changes within itself. These physiological changes will, in accordance with the analysis of the last chapter, be resolvable in common with other physical events into alterations in the arrangement of sets of sense data. A need, appetite, or desire will, therefore, be for theory of knowledge, an awareness on the part of the organism of changes in sense data originating wholly within the bodily structure of the organism. The psychological experience of the plant may be broadly conceived to be limited to feelings arising from the need for nourishment and the need for reproduction. We may say, then, that the scope of life as it manifests itself in plants is in the main limited to an awareness of those physiological changes originating within the bodily structure of the plant.[1]

Ascending the evolutionary scale we next come to animals. In addition to possessing that kind of life which consists in awareness of physiological changes within themselves, animals as compared with plants show an advance in awareness in two respects. In the first place they have knowledge of external objects such as trees, thunder, lightning, water, and other animals. These objects are all resolvable into sets of sense data; these are not the sense data of which the animal is actually aware, since, as we saw in the last chapter, the sense data which form the immediate objects of awareness are in part the products of physiological conditions within the organism. The animal's awareness of external objects differs however, from the plant's awareness of its own needs and appetites; the sense data of which the plant is aware originate mainly within the bodily structure of the organism, while the sense data of which

[1] This is, of course, true only of the general run of plants and not of borderline cases where the plant merges into the animal.

the animal is aware own a source outside the body. We may say, then, that animals show an advance in awareness upon plants in virtue of their greater capacity to be aware of sense data which, though modified by their own bodies, do not take their rise from and do not wholly owe their being to their bodies; they are externally originated sense data.

In the second place, animals possess what are called emotions; in addition to experiencing the appetites of sex and hunger, they are capable of, for example, fear, loyalty, and anger. Like the appetites the emotions are also to be interpreted in terms of awareness of physiological changes in the bodily organism; but they obviously point to changes of a more elaborate kind, occurring in a more complicated material structure. Fear, for example, according to the theory of emotions we are adopting, is awareness of the discharge of secretions by the adrenal glands, anger the awareness of an excretion of adrenalin which liberates the glycogen which is stored in the liver, and so forth.

Complexity of structure is important, since it illustrates the contention put forward above that advance in vital power is, at any rate in the earlier stages of evolution, conditioned by and dependent upon an advance in material structure. If the animal did not possess an adrenal gland, it would not experience changes in those particular sense data, the awareness of which constitutes the emotion of fear.

Before proceeding to interpret the next advance of life from the animal to the human mind in terms of advance in awareness, I should here like to guard against a possible misapprehension. I am conscious of having used language which may well suggest to some a mechanist interpretation of psychology, a suggestion to which my appropriation of the James-Lange theory of the emotions cannot but lend countenance. For James, and for most of those who have adopted this theory, the connexion between the physiological and the psychological event is automatic, the latter following the former with precisely that kind of necessity which characterizes the causation of events in the domain of physics. Many have gone farther, adopting some variant of the materialist position discussed in the first chapter, and maintaining that the awareness itself was but another physiological event not dissimilar in kind from the bodily happenings which the awareness recorded. Mind, they have held, is merely epiphenomenal, a by-product of material processes, limited in function to registering these processes. The most modern development of this line of thought is, of course, the psychology of the Behaviourists who, identifying what I have

called the mental awareness of physiological changes with bodily behaviour, tend in effect to deny the very possibility of psychology as a science distinct from physiology. I am not here concerned to advance objections against these positions; all that I wish to do is to emphasize their divergence from my own, a divergence which my account of emotion in terms of the James-Lange theory might otherwise tend to obscure. The chief point of difference lies, I think, in my view not only of the nature of the awareness but also of the train of events following upon the awareness. Whether the awareness is interpreted on physiological lines, or assigned the status of a distinct psychological event, many psychologists seem to regard the activity which succeeds it as automatic and determined, forming in fact merely another link in the chain of causation which began, in the case of anger for example, in the excretion of adrenalin.

Now in identifying emotion with the awareness of bodily sense data, I wish, in opposition to this view, particularly to emphasize the fact that this awareness is a psychological event which, in virtue of its psychological character, introduces a complete break in the chain of physical causation. The emotion, it is true, is an awareness of an internal bodily situation, but from this awareness, just because it is a vital event, results *may* spring which are not entirely preformed in or caused by the situation of which there is awareness. I use the word 'may' to indicate the fact that, once the awareness has taken place, life has, so to speak, stepped in, with the result that whatever succeeds its entry into the field can no longer be accounted for purely in terms of physical causation, but must be interpreted, at least in part, in terms of life itself. And by 'terms of life itself' I mean terms which, among other things, admit of the possibility of freedom and the introduction of contingency. In other words, I should urge, as against the theories referred to above, that, once the psychological awareness of sense data into which the emotions are analysable has occurred, it is no longer possible to predict what results will follow, just because those results are no longer caused but are in part newly created. They are created by the free operations of life, which, in virtue of its character as perpetual becoming, is continually bringing into the universe something which is new in the sense that it is not to be accounted for in terms of what went before.

In dealing, therefore, with those controversial questions touching the relationship of mind and body with which modern psychology is beset, questions which centre upon the problem of where precisely bodily action ends and mind action begins, I should be inclined to assign far more to physiology than most vitalists seem

willing to do. I gave reasons in the last chapter for dispensing with such mental existents as images and ideas; for similar reasons I should deny the existence of mental or, to widen the scope of the term, psychological existents such as feelings, desires, and emotions. Whenever what I may venture to call the physiologically minded psychologist endeavours to explain these phenomena in terms of bodily events, I should assent to his explanation up to the point at which there occurs what I call the awareness of the bodily events. But this awareness is a psychological not a physiological event; it puts an end to the causal sequence which has preceded it and, in respect of whatever succeeds it, the physiological explanation is, therefore, inapplicable. With the act of awareness the account of the behaviour of the organism in terms of an automatically determined mechanism ends, and the interpretation of it as a free creative being begins. But this does not mean—I repeat—that I regard the personality of the individual, as do many psychologists, as a stream of psychological entities such as desires, emotions, volitions, and feelings. There are no such entities as psychological entities. The only unit in the individual's biography which cannot be interpreted physiologically is his awareness; and this is not an entity but an activity. As such it is without feature or content, one act of awareness being distinguished from another not in virtue of some intrinsic characteristic of its own, but solely in virtue of the differences between the objects upon which the two acts of awareness are directed.

An emotion, then, is the awareness of sense data which may be said to originate within the body; a sensation is the awareness of sense data of which the origin lies outside the body.[1]

I am now in a position to resume my account of the evolution of life in terms of awareness. The nature of the advance involved in the transition from the animal to the human being is sufficiently obvious. In the human being life succeeds for the first time in emerging at the level of what may properly be described as mind. The differentiating characteristics of mind are thought and self-consciousness.

By thought I mean that power of mind which, to adopt a common-sense description, enables it to comprehend the general and the abstract. At this level the mind, instead of proceeding from particular to particular, proceeds to generalizations about

[1] This distinction cannot ultimately be pressed, but it holds good at a certain level. Thus, to take the emotion of fear caused by the sight of a tiger, the visual sense data, the awareness of which is the perception of the tiger, may be said to be externally originated in a sense in which the discharge of secretions by the adrenal gland, the awareness of which is the emotion of fear, is not.

particulars, argues from particulars that exist to particulars that do not but might exist, arranges the particulars under laws, and predicts in virtue of these laws the occurrence of further particulars, as, for example, from the fact that the sun has always risen in the east in the past, that it will do so to-morrow. These powers of generalization and of abstract thinking have been analysed in the last chapter into the awareness of subsistent objects.

The achievement of self-consciousness involves a similar advance. In human beings the mind for the first time begins to speculate on such questions as the meaning and nature of existence. It observes the process of its own evolution, tries to direct its course, and sets before itself definite goals in the immediate and ideals couched in somewhat vaguer terms in the remote future. It becomes, in other words, definitely purposive, or, to put the point more precisely, the purpose, which has hitherto been implicit in the unconscious drive of the life force, rises definitely into consciousness. Consciousness of purpose involves the awareness of subsistent objects, and the consciousness of purpose which characterizes the human mind is, therefore, dependent upon the emergence of life at the level we call thinking. Self-consciousness is only a particular case of this general advance. It is characteristic of the human being that he not only knows, but knows that he knows and, to some extent, knows why he knows. In other words, he considers and reflects upon his own mental processes. But the mental activities which we contemplate in self-consciousness are, as I have already tried to show, necessarily other than the mental activities which we have actually lived through. They are objects of thought, not aspects of the thinking subject, and, as such, fall within the category of subsistent objects. The capacity for self-consciousness, therefore, like the conception of purpose, only arises at the specifically human level of thought. Popular language recognizes this fact when it attributes to the philosopher—that is, to the person who is conceived to be more or less continuously engaged in thinking—the search for (and, in moments of extreme optimism, the discovery of) the purpose of life, endowing this same thinker with a knowledge of the 'how' and the 'what' of things, in addition to the plain man's awareness of the 'that'. Such knowledge proceeds from that reflection on the fact and nature of existence which self-consciousness alone renders possible.

But the power of life as manifested in the human mind is not limited to the awareness of subsistent objects. There is yet a further type of object of which intimations are from time to time received by certain minds. These minds in virtue of their advance

above the general level of contemporary achievement by the rest of the species, may be regarded as evolutionary 'sports' on the spiritual level. A discussion of the nature of these objects, and of the way in which, through aesthetic, ethical, and mystical experience, they are revealed to us, will form the subject-matter of Chapters VI, VII, and IX. I only mention them here because they enable me to complete this preliminary account of the development of life in terms of increased awareness, by suggesting the existence of a reality beyond that of which we are in normal experience aware, to a complete and uninterrupted knowledge of which I conceive it to be the purpose of life to evolve.

I hope to give reasons at a later stage for regarding the objects of which we obtain transitory intimations in aesthetic and more continuous knowledge in mystical experience, as forming a timeless and immutable reality, exempt from the laws of change and lying outside the stream of evolutionary process; as such, they exhibit all the characteristics of subsistent objects, and some which subsistent objects lack. If there are, in fact, such objects, they will possess a title and claim to be considered real which is different from, and (in a sense to be explained later) superior to, that of any other entity which falls within the framework of our philosophy. The world of subsistent objects is real in a sense in which what is changing and becoming is not real, just because objects of thought are, and remain what they are, instead of being continually in process of becoming something else. About them and them alone assertions can be made in the full assurance that they will not have rendered the assertion false before it is completely uttered, by ceasing, while the assertion is still in course of utterance, to be what they were, having changed already into something else. As Plato pointed out long ago, it is only possible to have true knowledge of that which completely is. Hence changeless objects can alone be considered to be the objects of true knowledge, and they alone can be apprehended by the mind. What is true of subsistent objects in general is true in an especial degree of the objects of value revealed in aesthetics and ethics, which, in a sense to be later explained, possess a significance which the subsistent object lacks. If the arguments to be adduced later are valid, objects of value have, I repeat, a better title to be called real than any other factor in the universe. Just as the subsistent object owns a higher degree of reality than the world of becoming, so are objects of value more truly real than subsistent objects. So far as our knowledge of the world of value has evolved up to the present, it is in the main the privilege and prerogative of mystics and, in an inferior

degree, of artists. But that ordinary men and women are not entirely devoid of it, the fact that art not only exists, but is appreciated, bears witness. Thus the mere life with which we started has already developed, not only into mind and consciousness, but into appreciation; not only into the power of knowing, but into that of loving. And this love is the love felt for reality itself.[1]

We may say, then, that the object of value of which a fleeting apprehension, although not a complete or continuous knowledge, has already been achieved, belongs to the world of reality; that reality, in so far as it is changeless and permanent, is nothing but the concourse of such objects, and that the object of evolution is so to develop and refine the quality of mind, which is the highest emergent of life hitherto evolved, that, just as in the past there has been development from awareness of internally originated sense data to awareness of the sense data that are called physical objects, and from awareness of physical to awareness of subsistent objects, so will the next advance bring life completely in touch with reality itself, where it may come to rest in continuous contemplation and enjoyment of what is permanent and perfect.

This is the *ultimate* purpose of evolution, that life may rise above the awareness of matter to the contemplation of reality. But the *immediate* purpose changes continuously according to the stage of development which has been reached, and may be identified with the endeavour so to advance in scope and extent of awareness as to widen the field of vision already achieved. Consciousness both of the immediate and the ultimate purpose develops *pari passu* with the development of purpose, but does not become explicit until the level of thinking that consists in the awareness of subsistent objects has itself emerged.

(4) *The method of evolution.*

The only other question that need be raised in this preliminary sketch is that of the method of life's development. I shall be concerned with this question more or less continuously during the remainder of the chapter, but a few words may not be out of place here as indicating in outline the view which will be later elaborated.

The individual is, I affirm, a unit of life, temporarily isolated from the main stream and objectified in a material mould for certain specific purposes. He may thus be regarded (the anthropomorphism of my language will receive justification later; meanwhile I hope it may be excused) as a tool or instrument of life,

[1] For the sense in which the word reality is here used see Chapter VIII (p. 325).

created by life in order that by its means life may rise above its present level to heightened powers of conscious awareness.

Why, it may be asked, should life objectify itself in this way, especially when such objectification necessarily involves a temporary division in what is otherwise a homogeneous flow? The answer lies, I think, in the conception of development and advance as conditioned by struggle. We have said that it is the function of life to change, and to change incessantly; but the change, if it is to be also an advance, must be one which is qualified by the need to struggle. When life is, by some accident, absolved from this need, it falls back and degenerates. Effete aristocracies and toy dogs are instances of the gradual declension of life when it is not keyed up to the highest efficiency of which it is capable by the need for struggle.

Now struggle arises from a sense of limitation. From it—it is clear—an omnipotent being is exempt; it is only a limited one which will strive to overcome its limitations. A being so limited is constituted by a temporarily isolated current of life which, partially cut off from the main stream, and thrown, as it were, upon its own resources, will struggle to overcome the limitations which spring from its separateness. This is the position of the living organism. Temporarily cut off from the stream of life of which he is an expression, he can neither draw upon its resources nor avail himself of its powers. He is, for example, at any rate in his ordinary day-to-day life, denied the use of such latent vital faculties as manifest themselves in telepathy, clairvoyance, and supernormal psychology. Hence he is forced to develop within the narrow limits of his individual compass, qualities which life as a whole, lacking the spur of his limitations, would have no incentive to achieve. It is the continual effort and struggle involved in existence at any given stage of evolution that enable life to develop the powers in virtue of which it succeeds in raising itself to a higher level. Translating this statement into the phraseology of the formula for development that I have already laid down, we may say that it is the exercise of awareness upon objects that lie within the field of the awareness already achieved, that extends the bounds of awareness to embrace new fields. Plato, describing in the *Symposium* the process which leads to the apprehension of the Form of Beauty, points out how the capacity to see beauty at any particular grade of her manifestation is developed by constant contemplation of beauty at the lower grade. It is by accustoming ourselves to the sight of beautiful objects that we sharpen and refine our vision for the apprehension of abstract beauty in laws

and institutions.[1] Adopting the same conception I urge that it is the effort and struggle imposed upon life in the individual by the limitations to which life as a whole has subjected itself, that enable the individual to rise above those limitations.

Finally we shall observe that the powers and faculties achieved as the result of the individual's struggle are not lost at death. The individual monad is reabsorbed at the break-up of the body into the universal stream of life from which it took its rise, with the result that life as a whole is continually enriched with the acquisitions made by its individualized units when objectified in matter. It is through this enrichment, proceeding from the accession of skill and enlargement of powers in its individual monads, that life is enabled to advance, manifesting itself in each successive generation of living creatures at a slightly higher level by reason of its absorption of the gains of the preceding generations. I shall return to this point later in connexion with the speculations of M. Geley in regard to the significance of supernormal phenomena.

I must now embark upon a more detailed treatment of the problems raised.

II. LIFE'S DEVELOPMENT THROUGH EMERGENCE.

So far I have tried to give a general sketch of the theory I am advocating, a mere outline of the purpose of life, of the relationship between life and matter, and of the emergence of higher qualities of life as the result of the conflict and struggle that the limitations imposed by matter engender. I have used question-begging words without explanation, and had recourse to metaphors which, in the absence of more precise statement, cannot but prove misleading. In particular, I have availed myself of an undefined concept of emergence whenever I have had to account for the appearance of apparently new qualities or faculties.

As this conception plays an essential role in my account of evolution as a developing and creative process, and is, in fact, responsible for the particular development which has resulted in the appearance of mind, it is desirable to begin the more detailed treatment of the problems raised in the preceding sketch by indicating the meaning which I wish to assign to it.

(1) *The Meaning of emergence.*

Emergence is a term used by Professor Lloyd Morgan to describe the appearance of new properties or faculties in living

[1] Plato, *Symposium*, 210.

organisms at particular stages of evolution. Emphasis is laid upon the fact that these properties or faculties really are *new*. They were not, that is to say, present in an embryonic, potential, or latent form in the stage of development prior to that in which they appeared. An organism, in other words, does exhibit powers and characteristics which were not preformed in the germ from which the organism has developed; there really is more in the chicken than there was in the egg, and it is of the essence of the doctrine of emergence that the word 'more' should be taken to imply not a greater quantity of something that was already there in some degree in the egg, but the appearance of additional qualities new in kind, of which an examination of the egg would reveal absolutely no trace.

While it has been chiefly used by exponents of creative evolution to describe the appearance of new qualities in living organisms, the concept of 'emergence' is also of value in chemical science. Certain chemical compounds possess properties which we are unable to deduce from an inspection of the elements which go to make up the compound, when these elements are taken in isolation. The characteristic properties of sodium chloride, for example, cannot be deduced from what is known either of sodium or of chlorine, or of any other compound of sodium or compound of chlorine. Water exhibits properties which no amount of information about hydrogen or oxygen taken in isolation would have enabled us to predict of their combination; if hydrogen and oxygen had not also been found in combination, nobody would have been able to imagine the characteristics of water. Of these chemical compounds we may say, therefore, that, as in the case of living organisms, the qualities exhibited in the compound are really new, and we shall mean by the word 'new' that they did not exist even in embryo in the constituent elements of the compound.

This conception of novelty is a difficult one. It is therefore desirable, even at the risk of seeming to labour the point, to indicate at this early stage in the discussion two possible meanings of the word 'new' as applied to emergent qualities, in each of which the word may legitimately be used, but in neither of which do I in fact propose to use it. It might be held (a) that the elements did actually possess in an undeveloped or embryonic form, even before they had combined, the properties which were subsequently discerned in the compound, but that these properties were not in the elements open to inspection by any method at present available. It was only, that is to say, when the elements combined, that the properties became discernible by human beings, although by beings

gifted with greater knowledge or greater powers of vision they might have been detected in the elements in their isolated state.

This is to retain the notion of newness for our perception of the emerged qualities, but to deny that the qualities are in themselves new. It is only, on this view, the limitations of human knowledge which cause us to regard them as such. A similar interpretation might be placed upon the appearance in the developed *living* organism of qualities not detected in the germ.

Or (b) it might be held that the new qualities which emerge upon the combination of the constituents, although in no sense present in the constituents themselves, were present in the universe before the combination, and, when the combination took place, were in some unexplained manner induced to manifest themselves in the compound. On this view the new qualities must have previously existed *in vacuo*, as it were, but have been enabled to actualize themselves in concrete form only when a material complex was formed suitable for their reception.

While admitting that these are both possible senses in which the word 'new' might be interpreted, I wish to make it quite plain that it is not in either of these senses that I am using it, when I speak of emergent qualities as 'new'. So far as the second of these senses is concerned, it is true that the theory of subsistent objects outlined in the last chapter requires us to suppose of any quality that may emerge in an organism or compound that its subsistent counterpart is and always has been a constituent of the universe, and as such formed an object for thought, though not necessarily an object of thought, before the emergence of the quality in the physical universe. It is not, however, in this sense that those who assign the meaning in question to the word 'new' wish us to understand that the qualities which emerge in the compound were present in the universe before the formation of the compound.

The elimination of these possible meanings of the word 'new' as applied to an emergent quality or characteristic, will serve to throw into relief the particular sense which I am reserving for the word, the sense, namely, in which we may say that any organism in which qualities have 'emerged' really does bear witness in respect of these qualities to the existence of something which literally *was not* in the universe before.

(2) *Dr. Broad's theory of emergence.*

The most important work on the subject of emergence in its application to mind is Dr. Broad's book, *The Mind and its Place*

in Nature. Although I do not hold the theory of emergence described in this book, a short examination and criticism of it will help me to state my own somewhat different view.

Arguing on the analogy of the chemical compound, Dr. Broad regards the mind as emergent upon the combination of two dissimilar constituents, which he calls the bodily factor and the psychic factor respectively. The bodily factor is a living body including the brain and nervous tissue; the psychic factor is not itself mind, but possesses some of the functions which are usually called mental. It can, moreover, for a certain period and in certain circumstances, survive the dissolution of mind and the break-up of the body.

So far as the ordinary facts of experience are concerned, they give us, in Dr. Broad's view, very little ground for believing in an independent psychic factor. The dominant scientific view of the relationship of mind and body is that referred to in Chapter I, and known in recent years as emergent materialism. This is the view that 'mind depends on nothing but the body, i.e. that mental events *either are* also bodily events, or that at any rate they are all *caused* wholly by bodily events, and do not in turn affect either each other or the body'.[1] An examination of the relationship between body and mind as exhibited in the normal facts of psychology and physiology would lead us, according to Dr. Broad, when taken by itself, to adopt some variant of 'emergent materialism'.[2] It is the study of supernormal phenomena which has convinced Dr. Broad of the inadequacy of this type of explanation. I shall return to the questions raised by these phenomena later in the chapter (pp. 201, 202). For the present, however, I wish merely to state the conclusions to which a fairly prolonged study of them has led Dr. Broad.

He thinks (1) that these phenomena cannot be dismissed as illusory; (2) that they cannot be entirely explained as emanations of the personality, whether conscious or unconscious, of the medium, or of any other living person; (3) that the view that the body of the medium may be possessed by a dead person has some basis in fact; (4) but that there are no reasons to suppose that it is the mind of the dead person which is in communication with or in possession of the medium.

If, however, it is not the mind of the dead person that possesses the medium, it must be something that persists which possesses *some* of the attributes of mentality, and some marks whereby it can be related to one particular mind rather than to another. This

[1] Broad, *The Mind and its Place in Nature*, p. 538. [2] Ibid., p. 647.

something that persists is called by Dr. Broad the psychic factor, and the marks which establish its connexion with one mind rather than with another are the traces or mnemic phenomena the nature of which was discussed at some length in the last chapter (pp. 103–8).

It is the evidence for the persistence of this psychic factor after the dissolution of the body that leads Dr. Broad to reject the view that materiality is an attribute possessed by all substances, mind being merely a characteristic emergent in a material substance at a certain degree of complexity, and to conclude that mind is emergent not upon matter merely, but upon a compound of which both the material substance of the body and the psychic factor are constituents. Whether Dr. Broad means that mind is identical with the compound, or whether he wishes us to understand that it is an entity composed of events different from the events of the compound, although dependent upon and caused by the compound events, is not altogether clear.

There is much in Dr. Broad's work with which I am in sympathy. In particular his refusal either to explain mind in terms of exclusively material factors, or to impugn the radical independence of matter, is one to which I entirely subscribe. Given, however, the necessity for some form of dualism in our interpretation of mind-body phenomena, it is by no means clear that in the account given by Dr. Broad of what is involved in the emergence of mind dualism assumes its most satisfactory form. Dr. Broad's theory appears to be exposed to the following difficulties.

(3) *Criticism of Dr. Broad's theory.*

Although the emerged mind is something new, in the sense that it is not entirely resolvable into the properties of its constituents, it can scarcely be regarded as completely separate from and independent of those constituents. It cannot be the case, nor does Dr. Broad say that it is, that what emerges on any given combination bears an entirely arbitrary relationship, or no relationship at all, to the elements combined, that it is, for instance, a mere accident that it is water and not fire that is produced by the combination of oxygen and hydrogen.

The fact that the emergent is not wholly deducible from or determined by the properties of its constituents does not mean that it bears no traces of them. And, if it does bear traces of them, so that we can say of an emergent that it must have developed out of such and such constituents and not out of others entirely different, then it must be determined, at least in part, by those

constituents. The theory of emergence, in other words, requires us to suppose that new qualities are created or called forth by the combination of certain constituents; but we are not to infer from this that the old qualities possessed by the constituents in isolation have been completely eliminated.

But one of the elements in the combination upon which, in Dr. Broad's view, mind is emergent is material. Mind, therefore, if the above argument be valid, must be conceived to possess some of the characteristics and to exhibit some of the properties of matter. That it is impossible for any form of Vitalism to rest in this conclusion will be sufficiently obvious for a number of reasons. I content myself with mentioning three.

(*a*) If Dr. Broad's theory of emergence precludes, as it appears to do, an exclusively non-material conception of mind, if mind must be regarded as causally related to (just because it is in part emergent upon) a material constituent, if, moreover, we are compelled to hold that traces of this material constituent carry over, as it were, into mind, what, it may be asked, becomes of the sharp distinction between mental events and bodily events upon which, as the result of his study of supernormal phenomena, Dr. Broad rightly insists?

The whole purpose of the emergent theory of mind is to endow mind with a nature distinct from that of matter, to emancipate it from the causal laws which matter obeys, and to claim for it a different order of being. It is because, for the reasons given in the first chapter, it seems impossible to explain mind action wholly in terms of brain action, that we are driven to postulate an order of mental events different from any type of material events. But, if mind is infected with the materiality of *one of the constituents* upon which it has emerged, this sharp distinction can no longer be maintained.

The theory in fact reduces itself to something perilously like the old epiphenomenal conception of mind, as a reflector or register of events occurring in the brain, although, since mind is emergent upon a second and purely psychic factor as well as upon a material one, the reduction to epiphenomenal materialism is never complete. But the traces of this material factor cannot, nevertheless, be wholly dismissed from interference with and participation in any and every activity in which mind manifests itself.

It is, for example, of the essence of mind conceived on non-material lines that it should not occupy space; it should, in Descartes's language, be devoid of extension. Directly we begin to attribute to it position in space, we are driven to think of it in

a material likeness, and, falling back upon the conception of a mist or halo round the brain, we find ourselves unable to maintain the sharp distinction between mind and brain, that is, between mind and body, upon which as Vitalists we must insist. Dr. Broad is fully in agreement here. 'A mind, as such, does not seem', he says, 'to be a spatio-temporal whole; we can, therefore, hardly talk of *its* spatio-temporal structure. If we want to talk of spatio-temporal structure in this connexion, we have to desert the mind and start talking about the brain and nervous system.' [1]

But if mind is emergent upon, among other constituents, the brain; if it is conceded that what emerges, although it may contain, although it may in fact *be*, none of its constituents, cannot emancipate itself entirely from the characters of its constituents, if emergence is not just an arbitrary creation of 'anything out of anything', but brings into being an emergent entity, which, though it may *in part*, in virtue of its novelty, transcend causation, is nevertheless *in part* causally related to the constituents that went to its making; if all this be admitted, then the conclusion presses upon us that the mind like the brain must have spatio-temporal structure and a position in the spatio-temporal system. It does not, in short, appear to be possible, if we regard mind as a compound emergent upon (in part) a bodily factor, to continue to think of it wholly in terms other than those appropriate to the bodily factor; and, if mind is once conceived in material terms, all the difficulties to which I briefly referred in the first chapter follow in their train.

(*b*) The use by Dr. Broad of material analogies to illustrate his conception of the mind's emergence is open to serious objection. If they are not to be taken literally, they are misleading; if they are to be taken literally, they presuppose a conception of mind which is incompatible with the vitalistic standpoint. These analogies are chiefly used to describe and illustrate the peculiar kind of unity which characterizes an emergent product. Water affords a good illustration of this conception of unity. Water, quite obviously, is not hydrogen plus oxygen but a new kind of entity, namely water, and the newness is bound up with and depends upon the fact of water being a unity of such a kind that oxygen and hydrogen are not even discernible on inspection as its constituent parts. It is the coming into existence of this unity that entitles us to regard water as an entity at once over and above and distinct from its constituents, that is to say, as a true emergent.

Now without questioning that this conception of unity in the

[1] Broad, *The Mind and its Place in Nature*, pp. 438–9.

physical emergent describes a fact, and an important one, it may be doubted whether it throws any light upon the type of unity possessed by mind. The unity of the physical emergent is an external unity; it is a unity, that is to say, which can be discerned by an external observer. But the unity of mind is of a different character, and is an internal rather than an external unity. The word 'internal' in this connexion seems to require explanation.

With regard to each mental act we can, it seems to me, postulate three separate characteristics.

It is (i) a mode of being, an existent; (ii) a mode of being aware of something, of that, namely, upon which the awareness that is of the essence of a mental act is directed; and (iii)—though this is not an inalienable but only an occasional characteristic—a mode of being aware of itself.

The mental process of which mind may be aware in (iii) is, as explained in the last chapter (p. 118), necessarily different from the mental act as it was when it was lived through. The mind can never be aware of itself as object, in the same way as it experiences itself as subject. Thus the mental act of which in self-consciousness there is awareness is the subsistent object of which the act as lived through was the vital counterpart. Nevertheless, self-consciousness, even if we analyse it into the awareness of a subsistent object, thereby reducing it to a particular case of awareness in general, is a special and peculiar characteristic which separates the mind that possesses it from all entities not so endowed.

Now when I say that mind not only *is* but is necessarily also aware, I am directing attention upon the essential characteristic of mental unity, namely, that all the activities of mind are two-sided.

Returning, then, to the standpoint adopted in the last chapter (pp. 105–8) in criticism of Dr. Broad's theory of mental causation, I should like to point out that this two-sidedness consists in the fact that each act of thought has a subjective as well as an objective aspect. The fact of being itself (i), which it shares with all other things that exist, inevitably involves the awareness (ii) as a necessary accompaniment of its being at all. Mind, that is to say, is a unity in which differences can be distinguished, not externally by a spectator, but internally by the mind itself, the differences being those between mind considered as being, and mind considered as awareness of objects external to itself, the latter activity including on occasion the special case of its awareness of the subsistent counterparts of its own mental acts.

Now, a unity of this kind is not a unity of ingredients, which have somehow fused or coalesced. In physical emergents, the constituents upon which they are emergent usually exist in isolation as well as in combination. Even when these constituents appear in compounds only, like the chemical radicals CH_3 and CH_5 that are not found to exist in isolation, the constituents are, nevertheless, both conceivable and describable outside the compound; we can say what they are like in isolation, just because it is by no means impossible that they may be segregated for study in isolation. But with regard to the various aspects under which the unity of mind is manifested, no such isolation is conceivable even for the purposes of thought. We cannot think of mind as being or existing, apart from mind as being aware of objects, nor can we think of mind as awareness of objects apart from the possibility of self-consciousness, which I have defined as the awareness of the subsistent counterparts of its own mental acts. Each of these three aspects belong to mind as a unity, and the unity is of such a kind that its dissolution would result not merely in a separation of the parts, but in the abolition both of the unity and of the parts. Mind, then, is not, like a physical emergent, a whole which emerges upon a combination of its parts; its parts, if parts they can be called, can only be discerned as different aspects of a whole which logically precedes them; they are, in short, not parts at all, but different manifestations of the same activity. As Professor Stout puts it, the unity of mind is 'the unity of a complex whole, which is indivisible, inasmuch as its partial ingredients have not an independent existence of their own, such that the whole could conceivably be constituted by taking them separately and then combining them'.[1] For this reason it seems to me that the attempt to conceive the emerged mind as a unified whole after the analogy of physical emergents breaks down.

(*c*) This conclusion, drawn from a consideration of the compound, is reinforced by an examination of its constituents. What, for example, is Dr. Broad's psychic factor? It is something, not the mind, which persists after the dissolution of the body, and may temporarily cohere with the bodily factor of another person, for example, with that of a medium. It is an element, that is to say, that continues after mind has ceased to exist. But does it exist before mind began? Has it any existence prior to mind that is yet a separate existence from that of the body? Dr. Broad does not contend that it has. Here surely there is a difficulty. Since the psychic factor is something that may persist after mind and body are

[1] Stout in *The Monist*, vol. xxxvi, p. 51.

destroyed, it must be regarded as an independent element in our make-up which is neither part of the body nor describable in physiological terms. But, though independent both of mind and body (in the sense that it can persist after their dissolution), it seems to have no existence as a separate entity *prior* to that of mind; if it has, we are not told about it. With what, then, does the bodily factor combine in order to form the compound which is mind, or upon which mind emerges? And what becomes of the analogy drawn from the combination of elements in chemistry?

Similar difficulties arise when we consider the bodily factor; this is a living brain and nervous system. But how and in what way living? By saying that it is living we can only mean that it possesses life, and possesses life in its own right. Clearly, then, it is to be distinguished in respect of its livingness from ordinary dead matter. Now, as I have already tried to show, the distinction between life and mind is an unreal one, every manifestation of life being also a manifestation, in however rudimentary a form, of mind. The presence of life, therefore, already presupposes mind. Hence mind appears to be required as a pre-requisite of the living brain and nervous system, upon which mind is asserted by Dr. Broad to supervene as an emergent.

This conclusion is strengthened by a reference to the physiological development of living organisms. Development of mind instead of being conditioned by and dependent upon the development of matter, appears to proceed *pari passu* with that of the brain and nervous system. From certain points of view, indeed, it almost seems as if mind development is itself a condition of bodily development, the bodily factor appearing to have grown and developed only through its association with mind. It may, I think, be confidently asserted that the evolution of the bodily organism, from its earliest rudimentary stage in the amoeba to its highly complex structure in man, would have been impossible without the continual interaction between it and mind. It can surely be no accident that the most complex brain structures are found in combination with the most highly developed minds, a circumstance from which we are, I think, justified in concluding that, if it had not been for the continuous activity of mind, there would have been no living brain and nervous system with which the psychic factor could combine. Association with mind is, in short, a necessary condition of the development of a highly organized brain and nervous system; yet it is not until such a brain and nervous system unite with a psychic factor that, in Dr. Broad's view, we can have a mind at all. Mind is, therefore, once again revealed as

a prerequisite of the development of that which is stated to play an indispensable part in the production of mind.

This position is, I think, untenable. To assert that the development of the mind and that of the brain have proceeded *pari passu* is one thing; to assert that the brain is a constituent of a mind which must first be assumed in order to explain the fact of there being a brain at all is another; and, although it may be difficult to see how, short of some causal dependence of one upon the other, this parallel development can have taken place, it is in the direction of a simultaneous development of the two interdependent factors rather than in that of a mind emergent upon a material foundation, that we must look for a solution of the difficulty.

(4) *An alternative theory of emergence.*

What, then, are the facts for which a satisfactory theory of emergence must account, the conditions with which it must comply? There are three which may, I think, be fairly regarded as fundamental.

(*a*) In the first place there is the fact that mental events and material events do seem to be radically different. Whatever success may be achieved in establishing a causal relationship between any two of these events does not justify us in placing them in the same series or in explaining either of them in terms of the other, any more than the fact that influenza leaves a tendency to melancholia justifies us in saying that influenza is of the same order of events as melancholia.

(*b*) On the other hand mind and body cannot be regarded as two parallel but disconnected series of events, such that the events in each series occur in complete independence of each other. Having postulated an accident to explain the initial connexion between mind and body, we should be compelled on this view to invoke an infinite series of further accidents every time a mental event is accompanied by a corresponding bodily event, and vice versa, assuredly an untenable supposition. If they are not dependent upon each other in *every* respect, *some degree* of interdependence must be assumed, and though the problem of how what is mental can affect what is material, and what is material can affect what is mental is exceedingly difficult and may be insoluble, there is nothing to be gained by ignoring it.

(*c*) In the third place both mind and body develop, and the development of one is accompanied by a corresponding development on the part of the other. Mind is never found apart from a brain, and the more highly developed the mind, the more

complicated the structure of the brain. The brain of a mathematician appears to differ, for example, from that of an idiot not in being larger, but in possessing a more markedly differentiated and complex structure.

But just as the higher levels of mind appear to be conditioned by complexity of brain, so does the brain itself appear to develop *pari passu* with the development of mind. By 'taking thought' man has added to the complexity of his brain structure. So far as the evidence derived from biology carries us, we never meet any organism with a brain which has attained a greater degree of complexity than the conscious life of the organism would appear to need.

Taking these facts into consideration, what account can we give of the development and interaction of mind and body? It is surprisingly meagre. Nor can we expect much help from the scientists. When we attempt to answer fundamental questions of this character the mass of data collected by psychologists and physiologists is of little avail, since it can be used to support almost any hypothesis. Accepting the fact of mind-body interaction as a fact which is either incapable of or does not call for explanation, the psychologists and neurologists seem to be satisfied with establishing the connexion between particular types of bodily and mental phenomena. Can we in our capacity as philosophers go farther?

In the first place, we seem to have no alternative but to adopt in some form or other the theory of emergence. Mind does evolve and develop, and at every stage of development there is literally 'more' mind, or, if this expression be criticized as carrying a spatial significance, there is mind possessed of more varied and more extended powers than there were at the preceding stage. The fact that we have seen reason to interpret this growth in power as an increased scope and subtlety of awareness does not, I think, affect the present argument. A similar emergence appears to be discernible in living matter, or more precisely in the brain and nervous tissues of living organisms. The difference between the brain of the earwig and the brain of man is not merely a difference in quantity; the tissue of which the human brain is composed is literally tissue of a new kind, such that it is improbable that the possibilities of the human brain could ever have been deduced from an inspection of that of the amoeba.

We seem driven, then, to postulate both for mind and brain, but more especially for mind, the continuous appearance of qualities not given or even hinted at on the preceding level of

development; and these qualities we must regard as emergent in the sense given to the word earlier in the chapter (see pp. 158 and 159). I have, however, shown reason to reject the interpretation of emergence suggested by Dr. Broad, in which the peculiar qualities of mind are regarded as emergent upon a compound containing a material constituent, and I must equally and for the same reasons refuse to regard the brain as emergent upon or as being a compound containing some mental element. We must not, in other words, obscure the sharp distinction between mental events and bodily events by conceding that either may be in part constituted by or bear traces of an element derived from the other.

If we accept this conclusion, we shall be driven to postulate a double emergence, an emergence, that is to say, of progressively higher levels of mind in an entity essentially vital, though only in the most rudimentary sense mental, from the beginning, and an emergence of more refined and complex cerebral tissue from the comparatively simple and crude material substance with which this vital entity was originally associated. We must hold further that this double emergence is conditioned by the association of the two entities, with the result that, just as we never find mind except in association with a complex cerebral tissue, so do we never find the peculiar degree of material complexity which characterizes a brain except in association with mind; but we must, nevertheless, maintain that each factor or entity remains radically distinct, the function of the material entity being not to enter with the vital into a compound upon which a higher level of the vital entity may emerge, but so to limit the operations and powers of the vital as to provide it with a necessary stimulus to transcend the limitation by emerging at continuously higher levels.

I can put the position most clearly by resorting to the use of symbols. If X be a rudimentary psychic factor and Y a rudimentary bodily one, then both X and Y are continually developing, X through a series of emergents X' X'' X''' and so forth, Y through Y' Y'' and Y'''. X' is not an emergent upon X and Y, but upon X only. Nevertheless, it is only through interaction with Y, which provides the stimulus to transcend the limitations imposed by Y, that X is enabled not only to develop higher emergents of itself, but to effect in Y such modifications as will render Y a less limiting and obstructive associate to these higher emergents. It is these modifications which transform Y into Y' and Y'', concurrently with the development of X into X' and X''.

As an illustration of the effect upon life of interaction with matter in causing a higher level of mind to emerge, I may refer

to the example cited at the end of the last chapter, of our knowledge of mathematical subsistent objects, a knowledge which emerges only through and after the perception of physical objects which stand to one another in mathematical relations.

(5) *Material limitation as the condition of development.*

In his book *From the Unconscious to the Conscious*, M. Geley has advanced a theory which may illustrate the foregoing conception of the effect of material limitation in stimulating the development of mind. His language is, however, somewhat unduly metaphorical and must not therefore be pressed too closely. In the course of a study of the significance of supernormal faculties such as clairvoyance, he finds himself confronted with the question why it is that these manifestations of mental activity, which undeniably occur, are so rare as to be termed abnormal. Why is it that mind which appears to be possessed on occasion of powers so enormously in excess of those which it normally exhibits, is able to call upon these powers so rarely? In order to place his answer to this question in its proper setting, I must say a few words in explanation of his general outlook; this I do the more readily since, while recognizing that his theories are in the main sheer hypotheses, I can find little to object to and much which seems to me to afford a valuable and plausible explanation of the development of mental faculties.

M. Geley conceives of life as a manifestation at different levels of an all-pervading spirit or force which he calls a dynamo-psychism. This dynamo-psychism has many features in common with Schopenhauer's Will, on the model of which it is in general conceived, but differs from it in not being the sole ground of all that there is. Another principle is recognized by M. Geley, as it is throughout this book, namely, that of matter, so that, although the dynamo-psychism manifests itself in and through matter, matter is not itself a manifestation of it.

An individual organism is constituted by a monad of the dynamo-psychism temporarily located in, or more accurately temporarily animating, a piece of matter. This individualized portion of the dynamo-psychism is manifested at different levels in the individual, expressing itself in a hierarchy of representations all of which are derived from the one common source. Of these representations the unconscious is the lowest, consciousness the highest; but within consciousness itself there are various subgrades which shade away into the higher grades of the unconscious. The unconscious is conceived on the usual lines, with two important

exceptions. In the first place, the unconscious is regarded as the seat of the higher and not exclusively of the lower faculties of the individual; in it is located the origin of sympathy and understanding; from it issue the inspirations of genius. Secondly, there is no gulf between the conscious and the unconscious; the two not only intercommunicate but continuously interpenetrate.

Although it is not positively asserted by M. Geley, that the manifestation of the dynamo-psychism in individuals is purposive, certain circumstances attendant upon this manifestation are noted which seem to possess a purposive significance. Of these the most important is the limiting influence exercised by the body upon the dynamo-psychism. The effect of the limitation is to compel the spirit to concentrate its energies and to guide them in a specific direction. Instead, that is to say, of a generally diffused awareness such as we might expect the dynamo-psychism to exhibit *in vacuo*, we find that it is made to narrow, and by narrowing to sharpen and refine its vision through the direction of its energies along a definite channel. 'Everything occurs', says M. Geley, 'as though each terrestrial existence, each organic objectification, each "incarnation", if the term is preferred, were for the real being a limitation in time, space, and means. It would seem to resemble a compulsion to a restricted and specialized task, an effort directed to a single aim, exclusive of others.' [1]

This limitation of spiritual powers in the individual organism is most clearly seen in the capacity for forgetting, and the evidence, or rather the lack of evidence, for supernormal powers. Let us consider these points separately. The difficulty with regard to memory lies not so much in the fact that we remember as in the fact that we forget. If the fact of remembering be regarded as constituting a difficulty, it is still more difficult to explain why, if we can remember anything, we do not succeed in remembering everything. M. Geley's explanation is that we do in fact remember everything in a sense, the sense in which all past experiences are said to be latent in the unconscious, and can, on occasion, be recalled to memory, but that, if the whole of our past experience were continually available for conscious reference, if, in short, we knew everything that had ever happened to us not only in this but—to extend the hypothesis—in past incarnations, or, if Butler's way of putting it be preferred, in the previous lives we have lived in the persons of our ancestors, the incentive to conscious effort in the present would be largely removed. The spur to mental endeavour is largely occasioned by a feeling of a present mental lack, and the

[1] Geley, *From the Unconscious to the Conscious*, p. 233.

urge to acquire new knowledge springs in part from a forgetfulness of the knowledge we have had. It is because the stock of information available to the mind at any given moment is so meagre, that we are continually under the necessity of making efforts to enlarge it. Mind, as we have seen, evolves and develops only through effort, and, if all its potential resources were at every moment effectively available, that incentive to development, which is afforded by a sense of limitation and deficiency, would be wanting. It is only when this temporary limitation of vital power which the material environment imposes has served its purpose, and the life of the individual is about to be reabsorbed in the main stream, that the full use of his latent vital powers is restored to him. For good or for ill a dying man has played his part; he has nothing more to contribute to the enrichment of life. The spur to endeavour present throughout his life in consequence of the limitation of his powers is, therefore, no longer required, and for a few brief moments he enjoys an extension of power and capacity denied to him in life. Thus, to take a familiar example, the drowning man remembers in a flash every detail of his past life, calling to mind, and not only calling to mind but reliving in an instant, experiences which for many years have been forgotten past recall.

It is for the same reason that supernormal powers such as telepathy and clairvoyance are ordinarily outside the range of our control. That mind can on occasion exhibit such powers cannot, M. Geley holds, on an unprejudiced examination of the evidence collected by psychical research, be denied. But were we enabled in normal daily life to foresee the future, to read the minds of our friends, and to communicate our thoughts to them without the aid of visible or audible symbols, our powers would not only be completely adequate to the demands of living, but might actually decay through lack of opportunities to occasion their full exercise. The drama of the lap-dog and the enfeebled aristocrat would be re-enacted on the boards of the universe itself, life would stagnate, and the mind instead of being driven by its own limitations to further efforts resulting in fresh acquisitions, would rest on the laurels of past achievements, which is, after all, what the unrestricted enjoyment of our innate powers would mean. But, as in the case of memory, when the need for further effort is past, when life is about to relinquish its hold on the individual and the work of the dynamo-psychism in that particular manifestation of itself is completed, then for a moment we come into possession of our full powers. Just as the drowning man is enabled to review the whole of his past life, so is the man in imminent danger of death gifted

with the power to foresee his own end and to convey his innermost thoughts to distant friends. The limitations, in short, are removed so soon as they cease to serve a purpose.

But we can go farther. The acquisitions which, in M. Geley's language, 'pass into the unconscious' and are forgotten are not irrevocably lost. We say that the limitations imposed upon the spirit by its association with matter debar us from the free, unhindered enjoyment of the full resources of the spirit, causing us continuously to forget and through forgetting ceaselessly to renew our efforts to acquire; and that, as a result, our vital energy is conserved by being concentrated along definite channels, the narrowing effect of which keeps it continually at high pressure. Thus in its continual struggle against the limitations imposed by its environment, the spirit is strengthened and sharpened through its constant need to triumph over the disabilities under which it labours. The states of consciousness engendered in this struggle pass and fade away into the unconscious; our conscious being forgets them. But this does not mean that they are lost, for the unconscious which receives them not only registers but assimilates. It is like a storehouse of the spirit, continually enriched by the treasures with which consciousness endows it. Nor does it passively conserve its treasures; for these new acquisitions, the fruit of the continual activities of the conscious self, are transmuted by the unconscious into faculties, which in due course appear again in the conscious as a new wisdom in action, an enlarged capacity for sympathy and feeling, and an extended scope and power of intellect in thinking. Thus we may conceive of the development of the spirit as a continual emergence in consciousness of new faculties which, proceeding from the unconscious, have been there formed and moulded out of the material received from consciousness. Nor is it necessary to confine the process within the limits of a single lifetime. There is nothing in our hypothesis to preclude some part of our personality, with which we may identify what is loosely called 'the unconscious', from surviving that elimination of the particular level of vital emergence known as consciousness which constitutes what is called the death of the individual. On the contrary it seems highly probable that it does. I would, therefore, suggest that the unconscious, enriched by the acquisitions gained by consciousness during the individual's temporary existence, reverts to the main stream of life, fertilizes it with the qualities that have been acquired, and enables it to endow the vital monads in which it next objectifies itself with faculties which were not available to the preceding generation. In elaborating this conception,

I may derive assistance from Samuel Butler's picturesque theory of habit as unconscious memory.[1]

Butler concerned himself with the question of how newly-born creatures are enabled to perform the complex and varied operations which the business of living involves, when the conditions are such as to preclude the possibility of their having consciously learned them through imitating the example of others. The newly-born infant, for example, knows how to grow its hair and nails and to circulate its blood; the chicken how to peck its way out of the shell; what is more, the chicken knows that it must grow a horny tip in front of its face, in order to peck its way out of its shell.

Butler's answer is that the infant and the chicken do these things because they have formed the habit of doing them; and that this habit is simply their unconscious memory of having done them on a vast number of occasions in the past. But how can the chicken have performed on previous occasions the operation which it now appears to be performing for the first time? Butler's answer is that it performed them, and remembers having performed them, in the persons of its parents, and it does this because it *is* its parents. This last assertion raises the question of identity.

Butler points out that there is a sense in which the man of eighty is entitled to assert that he is the same as the boy of six, so that he can say, 'I am the person who at the age of six did so and so'. In precisely the same sense the boy of six is the same as the embryo, the embryo as the impregnated ovum, and the impregnated ovum as certain constituents of the parents' bodies. Admitting, therefore, that it is exceedingly difficult to say in what sense the man of eighty is the same as the boy of six, it is in precisely that sense, whatever it is, that the boy of six is the same as his parents. His parents are in the same sense the same as their remote ancestors, so that not only the continuity but the fundamental identity of life, from its earliest beginnings up to its latest representatives, is established. Where living creatures in the persons of their ancestors have performed operations on vast numbers of occasions over considerable periods, they have learned them so well that they can now perform them unconsciously. Thus we may suppose that primitive organisms had to devote much of their attention to the performance of such operations as hair- and nail-growing and blood-circulating, that they experimented with various ways of doing these things, and only succeeded in discovering the most satisfactory method after many failures. Thus evolution proceeds by the method of trial and error, involving constant effort and

[1] See Samuel Butler, *Unconscious Memory*.

struggle on the part of the creatures who evolve. The process of transferring those operations which we have learned to do easily to the unconscious part of our natures by the formation of habits sets free the energy which was previously utilized in learning and attending to them, for other and more complicated activities. These in their turn will in due course become habitual, and the energy which we now spend in learning the multiplication table and the bicycle will at some future date be released for further acquisitions, when by dint of frequency of performance our future offspring are born with an innate knowledge of both.

Thus we establish a formula for evolutionary advance, which depends upon the assumption that the acquisitions of skill and knowledge made by individuals during their lifetime are not lost at death, but reappear as faculties in their descendants. This assumption involves in its turn the belief in the inheritance of acquired characteristics. This latter belief, greeted with scorn, when Butler advanced it, by a scientific generation labouring under the obsession of Weismann's germ-cell theory, and still admittedly a matter of controversy, has since received considerable empirical support from the experiments of Dr. Kammerer with salamanders and of Durkheim with the pupae of butterflies. The issues involved are technical and cannot be discussed here. It may be pointed out, however, (1) that the modern germ theory has very largely obliterated the distinction between inherited and acquired characteristics, at any rate in the form in which nineteenth-century biology maintained it, and (2) that there is no evidence to show that the physical constituents of the germ cell completely exhaust the inheritance which the offspring receives from its parents.[1] In any event, I see no alternative for those who advocate the doctrine of progressive evolution but to accept it, and to maintain that, just as the body of the embryo recapitulates in a short period of time all the past history of the physical changes through which the species has passed, so does the mind of the newly-born offspring rapidly ascend through all the levels of feeling and knowledge that have marked the progress of the race in the past, and emerge at a comparatively early stage in possession of the faculties so painfully acquired by its ancestors.

That the mind of the new-born child thinks in a brief period of time through all the mind-processes of the remote ancestral savage, that child-thinking, in short, is primitive thinking, is, indeed, a well-established fact. What is more, the investigations of Rivers and others have shown that primitive levels of thought and feeling

[1] See Chap. I, pp. 24, 25.

remain latent in the individual, and that he may, on occasion, regress to them. For this fact of racial recapitulation on the part of the individual both as embryo and as infant there is incontrovertible evidence. Yet unless we postulate some sort of universal clearing-house of memories and faculties from which each successive individual acquires or inherits a fresh stock it is difficult, if not impossible, to explain.

Professor Rignano, in his book *Biological Memory*, offers an explanation of these phenomena not essentially different from mine by identifying life with unconscious memory. The general features of his theory are, indeed, strongly reminiscent of Samuel Butler's. He points out, for example, that the fertilized egg embodies in its nucleus all the memories acquired during the past history of the species. When the egg begins to develop, these memories are handed on to the daughter nuclei which result from the division of the original nucleus, and it is in virtue of this inherited racial memory that they know what to do and how to proceed, performing, as Samuel Butler would put it, the various functions of existence and growth with greater ease and certitude the more frequently they have performed them in the past.

Luck, Butler remarked, is the unconscious wisdom of those who were consciously wise in their previous lives, an aphorism which admirably sums up, even while it caricatures, the process I have been trying to describe. We might add in the same vein, that intuition is the unconscious thinking of those who have reasoned consciously in their previous lives.

It is not necessary to accept in detail the whole of Butler's picturesque theory, although it is by no means unsupported by modern research, to recognize that some such hypothesis seems to be demanded by the facts—it is indeed difficult, if not impossible, to explain the definite advances exhibited at birth by creatures of later, as compared with those of earlier, generations without it—and that the hypothesis itself requires us in its turn to postulate a continuing reservoir of life which is constantly enriched by the return to, and the re-absorption in it, of the temporarily isolated currents which constitute the individual monads. In returning to their source these currents carry with them the acquisitions they have made in the course of their careers as individual units, and it is in virtue of these acquisitions that life, when it manifests itself again in an individual form, is enabled to exhibit that advance in consciousness and widening of awareness in terms of which I have defined evolutionary progress. What I am asserting, in short, is that the doctrine of the inheritance of acquired characteristics

implies continuity of life no less than continuity of material substance, an implication which follows from the position advanced in the first chapter that the inheritance of the organism at birth is not exhausted by its material characteristics.

Summary.

It is on these lines, or rather—for it is absurd to press the details of a process which is and must remain so little known—on lines similar to these, that the emergence of new mental faculties may be explained. Life, we know, is not static; it develops and in its development is conditioned by the chequered history of the past out of which it grows. Yet the actual method of development eludes and must continue to elude us. I have been trying to show how the emergence of mind, intimately connected as it is found to be with the development of matter, is always an emergence upon past levels of mind, and never upon the compound of mind and matter which is the whole organism; that in the process of the emergence mind is continually limited and hampered by matter in the sense that it does not and cannot develop farther than the potentialities of the brain, which is its channel of communication with the world of matter, permit; that these potentialities grow *pari passu* with those of mind, so that although the mind must needs, as it were, keep step with the brain, it is nevertheless tied to no sleeping partner but to one which evolves and develops together with the process of its own evolution, and finally that the restrictions imposed by matter upon the mind's activities constitute for that very reason an indispensable factor in their development by forcing mind to evolve new qualities and faculties in order to transcend them.

Hence, not only is mind associated with matter, but that association is a necessary condition of the development both of matter and of mind.

III. THE NATURE OF LIFE.

But what, it may be asked, is the nature of this entity of whose activities and capacities I have been speaking throughout this chapter? Calling it sometimes life, sometimes mind, sometimes spirit, sometimes the psychic factor; speaking sometimes of its control of matter, sometimes of its association with matter, and sometimes of its limitation by matter, I have nevertheless said little or nothing about life itself. I have neither discussed its origin nor described its nature. What is more, whenever I have tried to speak of it I have dropped into metaphor. In the last section,

for example, after beginning with a detailed and strictly logical treatment of Dr. Broad's theories of emergence, I have, when presenting an alternative suggestion, abandoned this method of approach, and insensibly adopted a phraseology which represents life as initiating this and devising that, as if it were a discrete, purposive entity in complete control of the body; while the operations of individual minds have themselves been subjected to the regulation of a life force or dynamo-psychism as evinced, for example, in its deliberate restriction of the mental powers of telepathy and clairvoyance, and its contrivance of forgetting, as if this life force were a definite, concrete entity, existing somewhere in the universe, outside the sum total of individual minds, yet purposively controlling and directing their operations.

What right, it may be asked, have I to introduce in this casual way a hypothetical entity which I have not defined, and to have recourse to these exceedingly anthropomorphic metaphors, so soon as I am driven to describe its workings? The implied charge must be admitted; and yet the mode of speech is, I think, largely unavoidable. For the moment we begin to talk about life, steadfastly maintaining that by life we do not mean matter or any combination of or emanation from matter, but something radically distinct from matter, then we are speaking of what is of necessity indescribable.

Let us suppose that a consideration of the arguments indicated in the first chapter has convinced us that there is something in the universe which is not explicable in terms of physics and chemistry; then, we have committed ourselves to the existence of that to which, *ex hypothesi*, none of the language which is used to describe material things is applicable. It follows that the nature and qualities of this something must largely remain wrapped in mystery. We must needs postulate its presence in the universe, since we find ourselves unable to understand the simplest of organic phenomena in its absence; but the facts which constrain us to introduce such an entity do not unfortunately enable us to catalogue its attributes.

That it is the source of energy and activity in living creatures, I affirm, but how it itself arose, whence it came, and whence it derives its energy, we do not know. To such questions, if they are pressed, I can only reply, as I have already done once in this chapter, by so defining my view of it that it begs them. To the question what animates or moves the force of life I must, for example, reply as Plato replied to a similar question about the soul, that I must needs regard it as itself the source of motion, since it moves without being moved by anything else.

The time and place of the first introduction of life upon the cosmic stage must similarly remain unknown. The attempt to trace its earliest manifestations in living organisms, with a view to ascribing these manifestations to the action of so-called natural forces, may succeed in pushing the problem farther back; but they do not solve it. We can picture the material molecules becoming more and more complex under what we call the vivifying influence of light. We know that light can produce vegetable substance from inorganic materials, and that this has been done even in the laboratory; we can in laboratories even form protoplasmic material, though not as yet living protoplasm.[1] Yet, even if we could, we should not have tracked down life itself. The element of life only enters it as the result of some antecedent source of life: the germ of life is handed on. And if we ask how the germ came into being, we cannot answer. My dualistic theory commits me to the view that there is always a dividing-line on one side of which we can say 'Here there is life', and on the other 'Here there is not life'. But where that line is to be drawn or how it comes to be crossed science is unable to say. If we depart from the strictly scientific standpoint in which we confine ourselves to the observation of facts, and seek to interpret them, we can venture the opinion that life does not appear to be inherent in material molecules as such, but to resemble rather a something added from outside, entering into the scheme of observable phenomena only when the molecules are in a state fitted to receive it, that once installed it appears to exert a guiding and controlling influence on matter, forcing it to act otherwise than in accordance with the laws of physics, as, for example, by ascending instead of descending a mountain, and to use the material forces of the universe, such as the heat and light of the sun, for its own ends.[2] But in making statements of this kind I am not asserting facts; I am merely reiterating my own belief that there is more in the facts than the materialist hypothesis has explained or is likely, when indefinitely extended, to be able to explain; and in affirming this belief I am entering a realm of controversy in which even the evidence upon which we most rely can be used to support a diametrically opposite belief.

Similarly, turning to the sphere of biology, I am entitled, having duly considered the evidence to which we referred in the first chapter, to affirm my belief that the occurrence of variations in species is inexplicable in terms of mere reaction to a changing

[1] See Chap. IX, p. 377, for an estimate of what precisely the manufacture of *living* protoplasm would involve.
[2] See further on this Chap. IX, pp. 375–8.

environment; that, although the environment may mould and direct the variations that arise, determining which shall survive and which be eliminated, material factors are unable to account for the fact of the occurrence of variations; and that this fact calls for the hypothesis of a creative purpose which, in its continual impulsion to self-expression and self-transcendence, objectifies itself in a material setting, thus producing the infinite and ever-changing variety of living organisms. Whereupon, having examined the different theories of the origin of variations that have been advanced, from Darwinism and Weismannism on the one hand to Neo-Lamarckianism on the other, I may conclude with Professors Thomson and Geddes that 'the secret of variability lies yet deeper, in the very nature of the living organism itself',[1] and proceed to interpret this as a statement of belief that life is *sui generis*, meaning thereby that the only account we can give of variations is that it is in the nature of life to vary.

But having done all this I am once again compelled to admit that I am only affirming a belief in a hypothesis which appears to me to fit the facts. I am not giving information about the nature of life, but merely asserting that, unless something be postulated having the characteristics which I believe life to exhibit, then the facts are inexplicable. And it is superfluous to point out not only that it is conceivable that fresh facts may put my interpretation out of court, but that even of the facts that exist different interpretations are possible. Nor is the reason for this inability to give an account of *what life is*, as opposed to an enumeration of the considerations which cause us to affirm *that it is*, far to seek.

(1) *The impossibility of defining life.*

In part of course it is the familiar difficulty, with which we are confronted, of describing the nature of anything which we affirm to be unique. Description is after all only a loose and partial form of definition; it tells you some of the attributes of what you are describing without attempting to give a complete account of all of them; and what is true of definition is, therefore, true also, in a degree which is less as the claims of description are less, of description. Now definition consists in giving an account of a thing in terms of something else, and, provided that two conditions are satisfied, it involves a real addition to our knowledge. These conditions are, first, that the terms in which the definition of X are given should in fact be applicable to X; secondly, that they are more familiar to us than is X itself, just as in a geometrical definition

[1] Thomson and Geddes, *Evolution*, p. 143. See also Chap. I, p. 6.

a new figure is always defined in terms of an arrangement of old ones with which the student is assumed to be familiar.

It is clear that an attempt to define anything which is unique must fail to conform to the first of these conditions, since, in saying of something that it is unique, one of the things we mean to assert is that no terms appropriate to the description of anything else are applicable to it. If it could properly be defined in terms of anything else, it could only be because of a fundamental kinship between it and that in terms of which it was defined; yet in affirming its uniqueness we are implicitly denying that such kinship exists. It is in this sense, the sense, namely, in which nothing can be regarded as possessing kinship with them or being of the same nature as they are, that all really ultimate terms are indefinable. The important question which we wish to ask with regard to an ultimate term, such as life, matter, goodness, beauty, is what meaning or significance we are to assign to it. The answer to this question is almost always exceedingly controversial, and, since definition necessarily involves giving a meaning to the term defined, that is, describing it in terms of something else, it is a question which all definitions must beg. Any definition of life, then, must assume first of all that the terms which it employs do not falsify but really apply to the object of the definition; and it must assume, in the second place, that the meaning which it proposes to assign to the word life is one which does in fact convey the nature of the entity in question. But in making these assumptions we are in fact begging the question at issue, 'What is the nature of life?'

As regards the second condition, it is part of my thesis that life is not merely an object of experience with which we may be familiar; it is not even the most familiar of all our objects of experience; it is implied in the very fact that we experience; in a word, it is experience itself. Nothing, therefore, can be more familiar to us than life, since we know it not intermittently from without but experience it continuously from within. Any terms, therefore, in which we seek to define life must necessarily involve a description of the more familiar in terms of the less.

(2) *The impossibility of knowing life.*

Apart, however, from these considerations which arise from the uniqueness of life, and which apply in a greater or less degree to the definition of whatever is unique, there are certain difficulties of a more far-reaching character, difficulties which apply not only to a description but even to a knowledge of life (so far at least as the ordinary sense of the word 'knowledge' is concerned),

which preclude us from giving any account of the nature of life itself.

I have, indeed, already touched upon these considerations in their bearing upon a particular problem, in the discussion of self-consciousness in the last chapter (p. 118). I there pointed out that, although we could entertain what I loosely call our thoughts as objects of contemplation, and not only entertain them but remember and describe them, our thoughts as contemplated were different from our thinkings as experienced, the acts of awareness which form the actual stuff of our experience. These acts of awareness in which, I concluded, all mental experience consists, cannot themselves be thought about, for the reason that they possess a unique characteristic as experiencing subjects, which is lost so soon as they are converted into the objects of fresh acts of experience. Thus we can never know what thinking is like, in the sense of being able to describe it, although all of us know in our own experience what thinking is.

The act of thinking is from this point of view only a special case of the act of living, i.e. it is the awareness of a special type of object. What is true of it is true of living, which is the being aware of any type of object. Life, we say, is realized in experience, and experience can only be lived through; it cannot be known. We can only speak of it in so far as we know it, and in knowing it, in making of it, that is to say, an object of experience, we falsify its character as experience itself.

But in saying that experience can be lived through by a subject, but not known as an object, I have hitherto mentioned only one of the reasons which preclude us from giving an account of it. A second and not less important reason is that experience is continually changing. In the second chapter I accepted Bergson's position in so far as it affirmed that life was perpetual change, but I did not accept Bergson's identification of this flux of change with the whole of the universe.[1] The universe must, I maintained, contain a principle other than that of life, a framework of inertia or matter within which and, in a sense, in opposition to which the development of life takes place. But in my endeavour to present a conception of life as a dynamic changing force, expressing itself not in thoughts but in thinking, I have used arguments which have always been consistent with, when they have not actually been derived from, Bergson's theory of the *élan vital*.

I should like in this connexion to refer for a moment to the famous passage at the beginning of *Creative Evolution*, where

[1] Chap. II, pp. 68–71.

Bergson seeks to show that experience is nothing but perpetual change. He is arguing against the view that our mental life is a succession of stable, independent states strung like beads along the thread of a hypothetical 'ego'. Not only does every state change and pass and give way to another; it changes no less, even while it persists.

> Take [says Bergson] the most stable of internal states, the visual perception of a motionless external object. The object may remain the same, I may look at it from the same side, at the same angle, in the same light; nevertheless, the vision I now have of it differs from that which I have just had, even if only because the one is an instant older than the other. My memory is there, which conveys something of the past into the present. My mental state, as it advances on the road of time, is continually swelling with the duration it accumulates.[1]

If this is true of our perception of external objects, it is even more true as a description of our internal states, our willings, our emotions, and our desires. Nor is it possible to distinguish in any particular mental state the part of it which changes from the part to which the changes occur. There is no part of which we can affirm that it is not itself change, but is the subject which changes, or to which the changes happen, just because any such alleged part proves on inspection to be itself continually changing.

Hence we arrive at the general conclusion that 'we change without ceasing, and the state itself is nothing but change'.[2] 'There is no feeling, no idea, no volition which is not undergoing change at every moment; if a mental state ceased to vary, its duration would cease to flow.'[3]

This conclusion, that there is only change, carries with it the corollary that there is nothing which changes, or, in other words, that there is nothing to change, since, in postulating such a something, we should be admitting the existence of something other than change. What is true of any internal state which the 'ego' may be supposed to possess is true also of the 'ego' itself. The human mind is not an entity to which things occur; it is a stream of dynamic activity, of which the only thing we can with certainty affirm is that at every moment the stream is different.

Now, if to say of life that it is continual change is to describe it, then it may be conceded that I have given some account of its intrinsic character. Yet the account tells us little about life. That becoming is an essential fact about life is agreed, and becoming from one point of view is imperfection. There is, that is to say, no completion in life; it has no more use for any grace or skill that it may have happened in the course of evolution to have

[1] Bergson, *Creative Evolution*, p. 2. [2] Ibid. [3] Ibid.

achieved than an artist has for his last year's masterpiece. Life that ceases to struggle away from whatever it is towards something that it is not ceases to be life. Hence life, as it is, cannot be described, simply because it is always half-way on the road to being something else; we can only give a negative account of it, an account which emphasizes what we cannot, rather than what we can, say of life. And this limitation dogs all attempts at description, since, if life be perpetual change, it will follow, first, that nothing that we can say of it at one moment will be necessarily true of life at the next; and secondly, that the very act of postulating it as an entity of which characteristics can be affirmed, will be a falsification of its nature, which is not that of an entity but of a flux. Just as I refused to give the act of thinking a mental content and proceeded to strip it of all qualities on the ground that it was bare activity, so I must rigorously reject any account of life itself which seeks to interpret it in terms of what it is, rather than in terms of what it does. We are unable to say what life is, to endow it with attributes, or to describe its qualities; and a similar interdict must be placed upon any account of that late emergent of vital activity which we call mind. We cannot, that is to say, answer the question with which I began this section, What is the nature of the mind with whose activities and capacities we have been concerned?

Faced with a variety of phenomena which do not appear to be explicable on the basis of the materialist hypothesis, I have no choice but to invoke the presence of life; it is to the activity of this life conceived as an energy or force that I attribute the phenomena, explaining them, that is to say, in terms of what life does. But when I endeavour to describe what life *is*, I am driven to invoke the aid of metaphor, metaphor which, for reasons given above, must of necessity be to some extent misleading. It was in metaphorical terms that I spoke of life in the last section, as acquiring higher qualities and more extended powers in its struggle against the limitations imposed upon it by matter; and it was a metaphor to refer to the deliberate restriction by life of those wider powers of mind which, since they appear in supernormal phenomena and in momentary acts of vision immediately preceding death, must be presumed to be potential vital endowments.

The hypostatization of life as a force or entity, and the attribution to this force or entity of some kind of plan or purpose, partake also of the nature of metaphor. Thus I have spoken not only of life but of the Life Force as desiring this or intending that, as if the Life Force were a purposive being engaged in stage-managing a performance on the boards of space-time, in which it wrestled with

matter for the mastery of the universe; in the concluding part of this section this quasi-personification of life as a purposive agency or force will assume greater prominence, until in the next chapter I shall be found attributing to it the device of creating the genius in order to convey its intentions to vital units.

What, then, it may be asked, is the justification for this anthropomorphic and somewhat ingenuous treatment? The answer, if not fully satisfactory, is not far to seek. Granted that the use of any terminology to denote a characteristic of life must be metaphorical, my attribution of 'purpose' to the Life Force rests upon precisely the same justification as my hypothesis of its existence. Just as, when confronted with certain phenomena of the kind studied by biology and psychology on the one hand, and afforded by our experience of the process of living on the other, I found myself confronted with the necessity for postulating a unique something which I called life, in terms of which alone they were explicable, so do some phenomena seem only intelligible on the assumption that this something is or may at times become purposive in character. They seem, that is to say, to be more susceptible of that kind of explanation which interprets a thing in terms of what it is trying to become, than of the explanation in terms of what it originally began as, or of what, on dissection or analysis, its constituent parts are found to be, which is appropriate rather to the subject matter of the naturalistic sciences.

But when I say of these phenomena that they seem to be intelligible only in terms of purpose, I am far from proving the necessity of the view I am disposed to take of them. Others might find them intelligible on some other assumption, and in any event canons of intelligibility derived from the nature (in which we must include the wishes) of human minds at their present level of emergence, although final in determining what we think to be true, must not be allowed to dictate to the universe in the sense of laying down what necessarily must be true. It may well be that the universe is not in all respects intelligible by us at our present stage of evolution. I cannot, then, too often insist on the speculative character of much of my hypothesis, nor guard myself too carefully against a dogmatic attitude. It is in this spirit of caution that I approach the question of purpose.

(3) *Life as purposive.*

On the respective values of the two types of explanation mentioned above I shall have more to say in the eighth chapter,[1]

[1] See Chap. VIII, pp. 344–52.

wherein I shall consider the validity of teleological as opposed to naturalistic modes of interpretation. For the present I want to anticipate the result of that discussion by saying that the teleological mode, which seeks to give an account of the nature of a thing, at least in part, in terms of what it is trying to become, seems to me to be the most fruitful method of approach to certain special classes of phenomena, and that it is to these classes that the phenomena exhibited by living organisms belong. Now it is obvious that the study of a thing in terms of what it is trying to become or to achieve is meaningless unless we are prepared to admit the applicability of the concept of purpose to become or to achieve to the thing in question. Whether we regard that purpose as a deliberate and consciously conceived plan or as an instinctive impulsion, we are, I think, committed, by taking a teleological view of the phenomena which we describe as purposive, to the assumption of its existence. To say that the Life Force has a purpose is a crude and no doubt misleading way of putting this; it is, however, a way which for the sake of brevity I shall adopt in the succeeding pages. I should like, therefore, at this stage to emphasize the point that, when I speak of a purposive Life Force, I mean merely that certain classes of phenomena seem to me to be explicable only on the assumption that there is life which is not matter, and that they seem also in respect of some of their characteristics to be susceptible of teleological interpretation.

I hasten to add that the degree of purposiveness which is claimed for the Life Force is, at any rate in the first instance, small, so small as at the earlier levels of organic life to be practically negligible. In the first section of the chapter I have given a brief sketch of the process of evolution, as I conceive it. In the initial stages of this process the element of *conscious* purpose is lacking. Life is a mere blind instinctive impulse or thrust objectifying itself in matter. At this stage, the phenomena of organic life are to be interpreted as an instinctive drive from behind, the teleological concept, in accordance with which the *raison d'être* of phenomena is sought in the end which they are in process of realizing, being almost entirely inapplicable. Through interaction with matter, life, as I have tried to show, makes a continuous advance, achieving new qualities of consciousness which reveal themselves in terms of a continuous growth in scope and depth of awareness, and exhibiting at each new level factors which were not present at previous stages of development. I think it is permissible to apply the word 'purposive' at this stage to the impulse of life to transcend itself, affirming that the level of emergence beyond that which is at any

given stage reached, is in some sense 'purposed' at that stage. In this sense, in which it is imbued with a continuous purpose to rise above itself, we may say that life is *purposive* from the beginning, each level of emergence being regarded as an end or goal for the level that precedes it.

But life is not a series of levels with steps leading up to them, but a continuously ascending process; and the conception of a level as a clearly marked stage which is in some sense to be regarded as the end of the process which leads up to it, affording as it does a good illustration of that cutting-up and hypostatizing tendency which Bergson rightly ascribes to intellectual activity, is not one that can be pressed.

The most that we can say of life as an unconscious impulsion is that, as objectified in individuals, it continually rises above itself, the process being analogous to that of a stream which continually overflows its boundaries, rather than to the deliberate carrying out of a preformed plan. When the stage of development is reached at which consciousness emerges, it is possible for our account to become more specific. It is in terms of consciousness, and consciousness alone, that the word purpose begins to acquire significance, and, as I shall try later to show, there is reason to suppose that a prevision of an end over and above the achievement of the next level of emergence begins to emerge when a certain stage of evolution is reached. It is the intimation of this end, an end which may be regarded as the goal of the whole evolutionary process, which has been in all ages the special privilege and possession of mystics; and it is in virtue of it that they have been able for a season to emancipate themselves from the play of emotion and the drive of desire which are the inevitable accompaniments of the life of the individual considered as an expression of an evolutionary process. This prevision of the end is now for the first time beginning to emerge. The stage of human development which culminates in civilization, long as it may appear by the standards of the historian, is from the point of view of the evolution of life so brief as to be almost negligible; yet it is in this stage that indirectly in the phenomena of artistic creation and appreciation, and more directly in mystical contemplation, an inkling of the purpose of evolution and the ultimate goal of human endeavour begins for the first time to emerge.

Summary of Argument. Evolution may be regarded as a process in which mind develops in association and interaction with matter. This development is to be conceived of in terms of an ever-growing capacity for awareness which takes the form of

discovery, as life obtains an increasing knowledge of the universe external to itself. This awareness includes a growing consciousness of the purpose which life is seeking to achieve, so that side by side with a growing capacity on the part of mind to fulfil that purpose, there is a growth in the realization of its nature. It is to this growth that we have referred as the emergence of purposiveness in the Life Force, which, beginning as an unconscious thrust or drive, throws up in the course of its development not only the consciousness that it is developing, but also—although the latter may scarcely be said as yet fully to have emerged—an intimation of the goal and purpose of its development. This intimation is, as I shall try to show, nothing less than an awareness of the nature of reality[1] itself.

Having tried throughout this section to absolve myself by a series of qualifications from the charge of too crude and drastic a use of the word purpose as applied to life, while frankly confessing that in using the word at all I am dropping into metaphor, I should like to add that this continual resort to metaphor, while a matter of necessity, seems to me not entirely a matter for regret. 'The greatest thing by far', said Aristotle, 'is to be a master of metaphor', and metaphor was for him pre-eminently the mark of genius, since it implies an intuitive perception of the similarity in dissimilars. It is certainly a fact that many of the greatest philosophers have not only had resort to imagery, usually in the form of metaphor but rising on occasion to the imaginative level of the myth, when seeking to explain their fundamental conceptions, but have almost without exception proved themselves to be masters of the device. All vivid thinking must be done in images, and the philosophers whose works have best stood the test of time were also, like Plato and Hobbes, the most remarkable for the wealth and vivacity of their similes. To say that analogy is a misleading guide in thinking may be true, but it is nevertheless our only guide. If, therefore, I point out that in resorting to metaphor to describe my fundamental conception I am following the precedent of the greatest philosophers, I hope I shall not be thought to claim membership of their company.

IV. THE STATUS OF THE INDIVIDUAL.

In concluding this chapter I wish to say something on a number of more or less isolated questions, partly to distinguish the view I advocate from others that resemble it, partly to fill in the general outline hitherto given with more detailed particulars on specific

[1] For the sense in which the word reality is here used see Chap. VIII, p. 325.

points. With this object I return to a question which was raised but not discussed in the second section of this chapter (see Section II (5)), the question of the relationship of individual vital units to life as a whole.

Two alternative possibilities present themselves.

1. *Life as the sum total of individual monads.*

In the first place we may hold, following Dr. Broad, that mind is an emergent upon a compound, and that mind can, therefore, only exist in or in combination with bodies. On the basis of this conception, and leaving out of account for the moment what Dr. Broad says about the mysterious psychic factor, we shall proceed to affirm with regard to life itself, that it can only occur where there is matter and in association with matter.

If we take this view, the conception which I have put forward of a universal stream of life, which I have called the Life Force, striving to express itself in an alien material and forming as a result the world of living organisms, but nevertheless transcending the sum total of these living organisms, will have to be abandoned.

If life can only exist in or in association with matter, then life at any given moment is exhausted by the sum total of all the living organisms which are recognized as possessing life, and which also possess material bodies. If, therefore, the whole world of living organisms were to be suddenly extinguished, not only would nothing possessing life remain, but life as a source of energy, the fountain-head and animating principle of living organisms would itself be abolished; the Life Force, in short, would go out of existence once and for all in company with its living manifestations. Life, then, on this view, is not a principle of force, which is over and above the sum of its individual manifestations; it is merely the collection of organisms which at any given moment happen to be living. From what has been said it will be apparent that I do not hold this view, but I recognize that there is a number of important arguments in its favour, of which I will mention three.

(i) First, life is nowhere found to exist (again with the possible exception of the psychic factor) except in or in association with matter. It is, therefore, a reasonable presumption that there is no life other than what is manifested in living bodies.

(ii) Secondly, a force of life which is other than a living unit or collection of such units is, it may be said, inconceivable. As I have already pointed out, we cannot represent life to ourselves without the use of metaphor. But whether the metaphor be that

of a fount or reservoir of energy flowing through but not exhausting itself in innumerable channels, or, following Bergson, of a centre from which rockets shoot out in every direction, it seems grossly inadequate.

I must in passing express a doubt whether either of these two arguments carry much weight. They have indeed already been to a large extent met. If life is an activity which is realized only in and by experiencing subjects, we cannot expect to know or describe it as object, while the argument that all the objects of which we are in sense perception aware are material or are framed in a material setting, carries with it the implication not that no object can exist otherwise than in a material setting, but that, if it did do so, we could not perceive it.

But, as our doctrine of subsistent objects has shown, we can still think of it. Nobody, for example, with the exception of certain philosophers, denies that there is such a thing as equality because we only *perceive* instances of things that are equal.

(iii) The third argument stands on a somewhat different footing and deserves closer examination. If each individual is a separate and distinct vital unit, owning no common origin and drawing its energy from no common fount, then the question of free will offers no special problem. Free will may still be a mystery, but its mysteriousness is not complicated by a hypothesis which derives the life of each individual unit from a common overriding authority. It is natural to regard the individual mind as autonomous, so far at least as the limitations imposed by its material environment permit, if there is nothing in the universe but other individual minds to regulate its activities. But if we regard the individual as a temporarily localized current of a stream of life, which transcends the sum of its individual manifestations, then it is difficult to understand how the direction of the individual channels can ever be other than that of the main stream; how, in short, the individual can, from the evolutionary point of view, ever go astray. There is a difficulty here, and one that seems to threaten the whole Life Force conception. Let us see in what it consists.

That the individual does go astray is sufficiently obvious. It is difficult to regard every manifestation of life as in the same sense and to the same degree purposive. The phenomena of conflicting desires (life turned, as it were, against itself), of apathy and inertia (life stagnating when it might be pushing forward), of insanity (life without direction or purpose), all seem to suggest that certain manifestations which are indubitably vital, and which, if we take the Life Force view, we must ascribe to a common source, must

be definitely written off as failures so far as the furtherance of evolutionary purpose is concerned. The genius and the half-wit are equally alive, the sage and the idiot are each expressions of the same vital impulse; yet it is difficult to conceive of them as fulfilling to the same extent the purpose, whatever it may be, that we have conceived to be the object of the evolutionary process; or, if this language be too anthropomorphic, as expressions of life of the same quality and at the same level. But if some have been able to further the purposes of life by raising the level of consciousness at which life objectifies itself in them, why, it may be asked, should life deliberately manifest itself in individuals who instead of carrying it forward may even retard its progress? Given that life is a purposive, creative force, objectifying itself in individuals in order that it may through them rise to higher levels of consciousness, given also that it can create at will the inventor, the mystic, and the genius, why should it go out of its way to produce together with them the idiot, the pervert, and the defective?

A partial explanation may be found in the consideration that the Life Force is limited and works in an alien material, doing the best it can with the means at its disposal; that it is, moreover, experimental in its methods, proceeding by trial and error and manifesting itself from time to time in organisms which are only found by experience to be incapable of furthering its purpose. We may further conceive that organisms suitable for the furtherance of its purposes at a certain stage of evolution proved unfitted to advance beyond that stage, and the Life Force, therefore, was under the necessity of evolving a new kind of creature equipped for the fulfilment of its more fully developed purpose. Thus, we may suppose the Mesozoic reptiles to have been scrapped because they were not capable of carrying life beyond the level which it had reached in them, and with them the other failures which the history of biology records.

These conceptions are no doubt of value in helping to explain the failure of life consistently to maintain the level which it reaches in its highest representations. The very conception of life as continually transcending itself in successive manifestations carries with it the view of earlier manifestations as relative failures, while, as regards the present, there will always be laggards on the march. Some special intractability in matter, some taint or flaw in the bodily mould, even, perhaps, an ill-advised experiment which, once tried, will never be repeated, may go far to account for the failures, the misfits, and the frankly retrograde elements that appear among living organisms.

But this explanation does not seem wholly adequate. There is, we cannot help feeling, more in the conception of human slackness and ineffectiveness than this. The evidence suggests that the failures of evolution are not entirely explicable in terms of the limited and experimental character of life, but are due in some measure to the autonomous actions of the individuals themselves. The facts of human experience point to some measure of responsibility here. They suggest that it rests in some degree with the individual organisms, created for a special purpose, to fulfil that purpose or not at their pleasure; that, when they might be furthering the ends of evolution they act in pursuit of their own, and that they do so act in virtue of a power of individual initiative, which bestows the capacity for choice, so that we are justified in saying that the failures of evolution go wrong when they might have gone right.

We are confronted here with the problem of individual free will; and the point that I wish to emphasize in regard to it is the special difficulty attaching to this conception, if we retain the notion of an immanent purposive force of life. How are we to reconcile the apparent even if limited freedom of individual monads with the dominance and immanence of an all-pervasive, vital Force? To this question it is essential to return some sort of answer, however unsatisfactory, if we are to retain our conception of the Life Force as a working hypothesis, and to reject the alternative notion of separate and completely autonomous units of life which we are in this section considering.

Digression on alternative conceptions of the relation between life and the individual monads. In trying to frame our answer we shall be driven to examine rather more closely the relationship between the Life Force and its individual manifestations than we have yet done. In common with other vitalist writers I have hitherto used a number of expressions to describe this relationship, some of which bear a slightly different connotation from others. The individual has been variously spoken of as an expression, a representation, a manifestation, or an objectification of the vital principle. Expressions of this type, which constantly appear in the writings of vitalists, are frequently used to indicate or affirm a difference in point of reality between the principle and its individualizations, and there is no doubt that many vitalists do, for one reason or another, maintain that the individual is in some sense less real than the principle of life. Other writers, however, for example Bergson, have regarded the individual as an aspect or representation of the all-pervasive principle, equally real with it

and falsely conceived as distinct from it. The various types of relationship suggested can, I think, be reduced to three, which it will be convenient to consider separately.

The individual may be regarded (1) not as distinct from the vital principle, but as continuous and identical with it; or (2) as a current of life which has been formed by an interruption or diversion of the main stream, but is still in some sense continuous with it, and partially determined by it; or (3) as a specialized portion of it, a monad of life completely isolated, whether temporarily or permanently, from the main stream, and, for so long as his monadic character persists, owning no connexion with the main stream.

(1) Schopenhauer considers that the whole Will is present in each of its representations. It is omnipresent and all-pervasive. Not only is it wholly present in each of us, but it is wholly affirmed in each of our acts. For this reason Schopenhauer's view that the use of the Will against itself by the ascetic who seeks to cut off the Will to Live at its source, really constitutes a victory over the Will, is inconsistent with his premise, since, so long as one individual remains who is subservient to the Will to Live and who pursues, therefore, the ordinary sensual life, the whole Will is completely expressed in each of his desires and manifested in each of his acts.

On this hypothesis, it is clear that conflict between desires is impossible. If the whole Will is present in any one of our desires, it clearly cannot be present in any other until the first has waned or passed away. There is thus no competition between desires; there is only a succession of desires. Further, if it is the whole of the Will that animates each act and desire of ours, it is clearly impossible that our desires and actions should be other than they are: in fact they are not ours at all, but only representations of an all-pervasive reality.

But if there is no conflict between desires, but merely a succession of desires, it is clear that any exhortation to the effect that we should suppress one desire in the interests of another, or of what is rational, is beside the point.[1] Suppression of desire is not on this view an act of the individual's will, that is, of an entity which is other than desire; it is simply the supersession of one manifestation of the Will by another, while, if our desires are not ours but are simply representations of the omnipresent Will, it is illogical to censure us, as Schopenhauer does, for having them or to expect us to control them. There is indeed no power

[1] Schopenhauer apparently overlooks this when in the interests of asceticism he tells us that we ought to turn the Will against the Will to Live.

by which we could control or oppose them except by means of some further manifestation of the Will. Yet even if we suppose that reality could control or suppress itself, we are faced with the difficulty raised in Chapter II of explaining how a principle of division can be generated out of perfectly homogeneous unity. I conclude, therefore, that even if we could admit the possibility of a relationship of this type, it rules out free will. It appears in fact to be open to precisely the same objection as the concept of free will favoured by orthodox theologians. This objection has already been stated in a different context in Chapter II (pp. 43–6). In view, however, of the prevalence of the belief in human free will, which is held to be not incompatible with the conception of an all-powerful Creator, I may perhaps be pardoned for summarizing it here, especially as the argument assumes a somewhat different form.

(*a*) If the Universe is the creation of an omnipotent, omniscient, and benevolent Deity, the acts of all His creatures proceed ultimately from Him. He cannot, then, be absolved from the responsibility for any human action, His responsibility, and consequently human irresponsibility, being clearly necessitated by the fact that His is the motive power behind every act of every living creature, if only because there is no other source from which this motive power can be derived.

(*b*) Even if we were to admit the possibility that pain and evil, error and inconsistency, are due to human sinfulness and imperfection and not to divine omnipotence, we are compelled to seek the origin of human sinfulness and imperfection. Now, if there is literally only one entity in the Universe, the seeds of these qualities must clearly have been implanted by that entity.

But if the seeds of potential sinfulness in the initial amoeba proceeded from God, and if the chain of evolutionary causation between the amoeba and man be assumed to be complete, it is clear that He cannot escape the responsibility for the latest and most flagrant case of human wickedness in the twentieth century.

(*c*) If we hold that God permits to us a measure of freedom for certain purposes of His own, we are faced with the difficulties of explaining (i) how a perfect being can be supposed to have a purpose. Purpose implies a need to achieve it; need implies lack of perfection in respect of that for which the need is felt. A perfect being would therefore have no needs. (ii) How an all-powerful being can divest Himself of certain powers and yet remain all-powerful. (iii) How an entirely good being can deliberately grant to limited and partial beings a degree of freedom which they will

use and which He knows they will use to introduce pain and evil into a world that knew them not. The deliberate acquiescence in the unnecessary introduction of pain and evil is not the mark of a being completely good. If our freedom is badly used, God, who wittingly gave it to us, cannot escape the responsibility for the bad use we make of it.

It is precisely these difficulties arising in a more abstract and impersonal form that are involved in the attribution of freedom to beings who are identical with the stream of life, in whom the *whole* stream of life is continually affirmed. The self on this view is like a bubble on a stream; the bubble has no life of its own apart from that of the stream on whose surface it appears. In particular, it lacks the capacity for spontaneous movement, its course being determined in every respect by the flow of the stream. Free will, therefore, in the sense of an individual will that can be other than, and even on occasion opposed to that of the vital principle of which the individual is a manifestation, does not and cannot exist.

Most Vitalists would, however, disavow the notion that the whole of the vital principle with which they identify reality is affirmed in each individual act. They prefer to speak of the individual as an expression of the vital principle, an expression which is separated, though only temporarily, from the main stream. Again the individual is spoken of as a specialized aspect or individualization of the main stream, who, for so long as he remains an individual, is emancipated from the control of the main stream.

The circumstance that the relationship so envisaged is not clearly conceived renders its formulation in precise terms impracticable. It seems, however, on examination to reduce itself to one or other of the two alternative views to which we referred under (2) and (3) above (p. 193). Let us consider these separately.

(2) The second, that the individual consists of a current of life formed as the result of an interruption or diversion of the main stream, but that he is still in contact, even in some sense continuous, with life as a whole, from which he continues to derive his energy, and by which his actions are determined (though the determination is not complete), is my own view, and it will be considered under 2 below (pp. 199–206).

(3) The third view, that the individual organism is a vital monad existing in complete isolation, may be held in one or other of two forms. Either there is a vital stream of force in addition to the sum total of the individual monads which are, nevertheless, completely separate from it, or there is not.

The first alternative is surely untenable. If the main stream of life be a purposive principle such as we have envisaged, evolving in pursuit of an objective, however obscurely conceived, we cannot but wonder with what object it should project from itself vast numbers of vital units whose energies it cannot replenish, whose movements it cannot control, and whose activities it cannot direct. It cannot, it may be noted, even determine when these activities will cease; yet although it cannot do this, we are asked to suppose that by the dispersal and projection of its own essence into these limited and temporary beings it has determined their beginning.

Not only does the process so envisaged seem pointless, but it fails to explain the common though different levels of development which vast numbers of living organisms exhibit. If the members of a given species are distinct vital units, completely autonomous and undetermined in respect of their activities, owning no common purpose, and inspired from no common source, how are we to explain the fact that, as a result of the haphazard process of following their independent courses, they have arrived at a stage of development which is in all of them so nearly the same? We can only invoke the hypothesis of pure coincidence.

A further difficulty presents itself touching the degree of reality possessed on this view by the vital monads. Are they, we would ask, as real as the continuing stream which coexists with them? Scarcely, since their existence as separate units is temporary, while it, we may presume, is eternal, even if it is eternally changing. Nor can we, on this view, endow them with that degree of continuing reality which on mine is attributable to the vital units which, being merged at the death of the individual in the main stream of life, partake of eternity just in so far as it is eternal, since this would imply a fundamental connexion between the vital monads and the stream of life which the notion of complete separateness precludes. Once that connexion is snapped, as this view requires us to suppose, it cannot be re-established at will at the death of the individual.

But if the vital monads, being temporary merely, are in this respect endowed with a reality inferior to that of the main stream—and this is a view to which most vitalist writers, among them Schopenhauer, Geley, and Driesch, seem to subscribe—we are met by the familiar difficulties raised in Chapter II, difficulties which have from time to time reasserted themselves in this chapter, how an eternal continuous unity can be the source of the being of temporary plural units. If the vital monads are less real than the main stream, how can they have been generated out of it; how, in

short, can reality become less real than itself? This supposition, that the real and the eternal can be the inmost source of the being of the less real and the temporary, which, having emerged from it, proceeds thenceforward to exist in complete isolation, is assuredly untenable.

We are left, then, with the second alternative which asserts the existence of a number of separate vital monads but disavows the notion of a vital stream which is over and above their sum. It was upon a consideration of this hypothesis that I embarked some pages back (see 1, p. 189), and I am now in a position to resume my consideration at the point at which I digressed. In favour of the view that the sum total of the individual monads constitutes and exhausts all that there is of life, I noticed, as a third argument, that it absolves us from the difficulty of accounting for the appearance of free will, a difficulty which was raised in an acute form by the hypothesis of a force or stream of life which was at once transcendent and immanent. It was at this point that I proceeded to a digression on the relation of life to the individual monads.

So far, I have considered only the arguments in favour of the hypothesis that life is exhausted by the monads. They are, to my mind, outweighed by the considerations which can be advanced against it.

Objections to the view of life as the sum total of individual monads. (*a*) This view is usually held in conjunction with the belief that life is literally the only entity in the universe, and that matter is an illusion; it reduces itself, that is to say, to spiritual Monadism. I am precluded from this belief by my theory of knowledge. The purpose of the considerations advanced in Chapter III was to show that the object of knowledge appears to the knowing mind exactly as it is. If, therefore, it appears as a red sense datum, there is no reason to suppose that this appearance belies its reality, which is not, therefore, that of a spiritual monad.

Matter, then, is real and exists in conjunction with the monads. On this assumption the theory that there is no life except what is to be found in living organisms, is usually advanced by those who hold that life in general and mind in particular are emergent upon a partly material compound. Dr. Broad, as we have seen, holds this view, at any rate in regard to mind, which, he considers, emerges on a compound or a combination of a bodily and a psychic factor. Now it is of the essence of such a theory that some at least of the properties of the emergent shall be other than those of the constituents. The constituents possess in their own right only a

certain number of properties, those, namely, which they exhibit in isolation; when they enter into combination, the fact of combination gives rise to new properties other than those given in isolation.

It is some position of this kind which is, I take it, affirmed by the theory of mental emergence, and it is a view which for my part I am largely, if not wholly, prepared to accept. But I do not see how the theory can be held in conjunction with the hypothesis I am at present considering. If mind is the result of the combination of two different factors, one of which is the bodily factor, what is the other? It cannot be mind, since mind emerges upon the combination. It cannot, as I pointed out earlier in the chapter, be the psychic factor, since the psychic factor does not precede mind, being that which is left over after the compound upon which mind emerges is dissolved. It is in virtue of the persistence of the psychic factor that I assert that there has been a compound; but I assert this because it is observed to survive the compound, not because it is found to precede it. The psychic factor, according to Dr. Broad, entitles us to say that there was a mind, but not that there will be one. It cannot, therefore, be with a pre-existing psychic factor that matter combined to form mind, nor, for similar reasons, with any other type of mental entity.

Finally it cannot be life in general considered as a force or principle that enters into combination with the bodily factor, since I am expressly proceeding upon the hypothesis that there is no life outside the living organisms which are themselves the combinations in question. So far, therefore, are we from being in a position to specify the nature of one of the constituents upon which mind emerges, that we are not even able to conceive how, on this hypothesis, there could be such a constituent.

(*b*) The second objection is also one to which I have already referred in discussing Dr. Broad's theory of emergence. If we assume that there is no such thing as life with which matter may combine in such a way as, on Dr. Broad's view, to condition the emergence of mind, it follows that the entity or compound entity upon which mind emerges must be material. Unless, therefore, we are to conclude that what emerges upon any given substance bears in its properties no relation to that substance, that an emergent is, in fact, arbitrary in the sense that anything may emerge upon anything, we cannot avoid infecting mind with some at least of the characteristics of matter. Not only shall we be unable to say where the mental begins and the material ends, but we shall be unable to affirm of any single mental activity or vital

manifestation that it is not in part material; and if it is in part material, it follows that mind must in respect of that activity be amenable to the laws of physics.

It is, of course, always open to us to abandon the emergent theory altogether, and to hold that every piece of matter to which we give the name of living, while not itself in any respect vital, has a vital essence, as it were, tacked on to it which is yet not an emergent. But in the absence of any explanation of the origin and source of the vital essence and of its relationship to other vital essences (unless we are to take refuge in the belief that the association of life with matter in innumerable living units is a sheer coincidence), it seems almost impossible, if we refuse to entertain the hypothesis of a continuing stream, to resist the view that the vital essence is in some sense an emergent upon or a product of the matter with which it is found to be associated. But this is precisely the view that I have already considered and to which, as I have shown, there are objections. These objections seem to me to be valid against any vitalistic theory which regards life or mind as in any sense emergent upon matter or upon a material compound.

2. *Life as a principle transcending the monads.*

It remains briefly to consider the alternative hypothesis that there is in the universe a principle or a force of life which is distinct from matter but which succeeds in associating itself with or animating matter, in such a way that each living organism owns, in respect of its livingness, but not in respect of its material structure, a common source in this principle which, nevertheless, transcends all living organisms.

On this view we are required to postulate a continuing life-factor, which, for reasons at which we can only guess, manifests itself in a plurality of material forms. I have even suggested (see p. 148) that life at some level of emergence may now be inherent in every collection of material particles, so that, although there is life which is not objectified in matter, there is nowhere matter which is not in some degree animated with life. Each individual mind is, therefore, a current of life informing a collection of material particles, and temporarily diverted from the main river.

The advantage of this view is that it enables us to find a common ground for all living phenomena in one continuing life-principle. I shall say of this principle that it enters into association with and animates matter wherever it finds matter appropriate for its reception, and that thereafter the two, by means of a continuous

interaction, develop *pari passu* on the lines already suggested, the advance of life conditioning and being conditioned by an advance in complexity and delicacy on the part of the matter of the brain. Borrowing a metaphor from electricity, we may say that different grades of matter are enabled to take higher potentials of the Life Force. If we do not entertain some conception of this kind, we shall be compelled to postulate a fresh creation of life (not an emergence of life upon matter, since I have already shown objections to this view), but a fresh creation of life out of nothing whenever matter reaches a certain condition. To postulate such a creation, unrelated to and owning no common source with other similar creations, is to substitute an infinite number of continuously recurrent, unrelated mysteries for the one mystery of life itself.

Bringing together the various lines of argument of this section, we may state the problem as follows. With regard to certain kinds of material structure we say of them that they possess life, or manifest the quality of livingness. This quality may noncommitably be described as a certain peculiarity of behaviour. What is the cause of this peculiarity? There seem to be two alternative answers to this question, to one or other of which all the different answers that may be given reduce themselves. Either the peculiarity is due to the way in which the atoms and molecules of the structure are arranged, so that wherever the particular form of required arrangement occurs, life is spontaneously generated as an epiphenomenon upon the arrangement in question; or, there is in every organism which we call living a something, 'entelechy', 'psychoid', 'life force', call it what you will, which animates the material structure, but which is not itself material.

The first answer either reduces itself to the frankly materialist hypothesis, or else, if we are not content with a purely material interpretation of life, requires us to postulate the occurrence of a new and unrelated miracle whenever and wherever life occurs. Either hypothesis appears to be open to fatal objections. In favour of the second answer I may urge the following considerations.

(1) A vague and generalized intimation common to human beings, to the effect, first that they exist for a purpose, and, secondly that they are not isolated phenomena, but that the life they share with other living organisms is in some sense a unity. As regards this sense of common purpose it is possible to say very little beyond asserting that it exists. It expresses itself in the belief (shared by the great majority of individuals) in progress, and in the conception implied by this belief that life is not a meaningless accident,

but evolves in a definite direction towards a specific goal. Men may and do differ as to the meaning to be given to the word progress, and hold widely divergent opinions with regard to the nature of the goal. These differences, however, though significant, are less significant than the fact that there should be conceptions with regard to which the differences exist. If life is a meaningless phenomenon, such that its occurrence in one material structure bears no relation to and has no connexion with its occurrence in another, it seems impossible to explain how the notions of goal and of progress arise.

The conception of the unity of life is equally incapable of exact statement. For those who feel it, it implies more than a mere perception of similarity between themselves and other organisms which are recognized as living. It approximates more closely to Schopenhauer's recognition of the Will as the inmost essence and kernel of every individual thing, the force that not only animates men and animals but germinates in the vegetable world, expressing itself not only in the thoughts and desires of human beings, but in the impulsion of instinct in animals and the ascent of sap in plants. All these, Schopenhauer affirmed, are in their inner nature manifestations of one and the same force. This feeling of the fundamental community or unity of all life is admittedly not shared by all, and those who are without it may well feel justified in dismissing it along with the belief in progress and the conception of a goal, as a subjective illusion on the part of those who experience it.

To say that such feelings are merely subjective products of human needs owning no counterpart in the nature of things and, therefore, devoid of objective reference, does not meet the point. The needs may be ours and of our making, but the situation in which the needs arise is not. The situation in question is objective, a fact about the universe for which we are in no way responsible. We are entitled, therefore, to affirm that the nature of the universe (and by the nature of the universe I mean that which is independent of because prior to our wishes) is such that there arises in it at a certain level of emergence a belief in progress and a widely felt intimation of an end. For this objective fact about the universe the first of the two answers suggested above affords no explanation.

(2) In the second place, there is the whole mass of facts connected with what is called supernormal psychology. This is not the place to discuss the trustworthiness of these facts, nor have I the equipment necessary for an estimate of their importance.

As I conceive it, it is the function of philosophy, as contrasted with the sciences, not to question the validity of the facts revealed by scientific research, but to consider their implications and significance. But the very circumstance which requires the philosopher to take the spheres of all the sciences for his province, precludes him from speaking with authority on any. He has no alternative, therefore, but to accept the facts with which the scientist presents him, and, assuming the facts to be valid, to consider what is the nature of the universe they imply.

Where a science has succeeded in establishing a definite body of agreed data to serve as the basis of speculation, this procedure on the part of the philosopher is unobjectionable. In the case of supernormal psychology, however, not only does no body of agreed data exist, but the interpretation to be placed upon the varied and baffling phenomena which fall within its sphere is a matter of acute controversy. Here, therefore, is no foundation upon which the philosopher can hope to build.

That he is not for this reason justified in ignoring the phenomena in question is a fact which Dr. Broad has been almost the first to recognize. Dr. Broad has not only thought fit to include a detailed survey of the results achieved by psychical research in his recent book, but has also after careful study expressed the view that some part at least of these results are only explicable on the assumption that something which he calls the psychic factor survives bodily dissolution. As we have seen, Dr. Broad does not identify this factor with mind, nor does he claim for it indefinitely continued persistence.

But even if we accept the kind of phenomena which Dr. Broad discusses as valid evidences of the survival of something, we enter the region of pure hypothesis when we attempt to explain them. Hypothesis for hypothesis, it seems no less reasonable to assume that the surviving psychic part of the individual organism is merged again in the universal psychic stream, whose continuous activity I am postulating as the driving force behind evolution, than to endow it, as Dr. Broad does, with an isolated and temporary existence which is independent both of mind and body. In favour of the conception of the continuing psychic stream I may note that it countenances, and indeed determines, the formula for evolutionary progress which I endeavoured to establish in the preceding section (pp. 173–5).

According to this formula the individual is merged at death in the universal stream of life; but, while his individuality vanishes and is lost, the acquisitions made during the course of his existence

as an individual monad remain to form a permanent enrichment of life, enabling it to manifest itself at a higher level in later members of the species. I pointed out that it was only on the basis of some hypothesis of this kind that we can explain the fact, long known to psychology, that the embryo and the infant in their development recapitulate in a few months all the past history, psychological as well as physiological, of the race.

This view presupposes in its turn a continuing stream or repository of life, in which the memories of past activities are stored, and from which they are derived by each fresh individual in which life manifests itself.

It remains to add a word on the question of free will, which I showed some pages back to be the chief difficulty in the way of the view I am now advocating.

Free Will and Matter. As I have already pointed out, the phenomenon of what I have called individual rebelliousness and laziness is partly but not completely accounted for by the conception of life as limited and experimental, discovering by process of trial and error, and at the cost of innumerable failures, what sort of creatures best serve its purpose. It is not merely the fact that life is not all-powerful that prevents evolution from being a steady march forward, but that it is thwarted and obstructed. It was to this conclusion, moreover, that we seemed to be driven by the inability of monistic theories of reality as a single indivisible flux to explain the phenomena of existence, an inability to which I drew attention in Chapter II.

Without anthropomorphizing this obstruction into a crude and Satanic personality, we cannot but feel that Manicheism is right at least in this, that, when faced with the question 'Why, if the world is the creation of an all-good God, is it not all good?' it answers it by asserting that God though all good is not all-powerful, and is thwarted by something which is other than good. In the terminology I have been employing, we may say that the reason why the rate of evolution is not maintained with uniform rapidity in one direction in all organisms, why, in other words, life does not proceed resistlessly to its appointed end, is that there is something in the universe which obstructs it. And, since the advance of evolution takes place only in the individuals that have been created to carry it forward, the evidence for the origin of the obstruction must be sought in individuals.

Reverting for a moment to the argument of the second chapter, it will be remembered that I endeavoured to establish the following positions.

(1) That a reality which is a complete unity cannot from within evolve the principle of differentiation, which is a condition of its manifestation in a plurality of individuals.

(2) That the occurrence of this differentiation cannot, therefore, be explained unless we assume in addition to the unity of life some principle of obstruction other than life and external to life, in contact with which life is diversified and broken up.

To these positions I may add the conclusion derived from the discussion on free will earlier in this chapter, that unless such a principle of obstruction be assumed, it seems impossible to conceive how the individual can avoid being determined both generally and in each particular action by the operation of the vital principle. Given the existence of this obstruction, however, we are at once provided with a ground for plurality and an explanation of the limitations of the spirit as it manifests itself in plural units. I use the word limitations, yet it conveys an impression of the position in which the individual finds himself which is the exact contrary of that which he himself entertains in regard to it. For it is to this obstruction, which constitutes for the Life Force a limitation of its power over and in the individual, that the individual owes his sense of personal freedom.

Plato held that the sensible world was a combination of the principle of Being and the principle of Not-Being. To account for it, we must postulate a medium, a sort of substratum which being itself featureless may be conceived as a Not-Being, in which Being may manifest itself, and the creatures and objects of the world of sense partake therefore in equal measure of the principle of Not-Being of which they are compounded, and of the principle of Being that informs it. Owning this double origin, their natures, as might be expected, conform in part to those of each of their constituents, but exhibit in entirety the characteristics of neither. In particular they fall short of complete Being. Hence, those who would seek for an explanation of a sensible object in terms of Being alone will go astray. Something must be allowed for the distorting and obscuring effects of the Not-Being of which they also are compounded, and it is in virtue of this something that we may say that their nature is not completely in accordance with Being, and may exhibit features contrary to and at variance with the characteristics of Being.

It is after some such fashion as this that I conceive the origin of free will in individuals. Speaking metaphorically we may say that the Life Force seeks to rise to higher levels of consciousness, at which it may direct its vision beyond the objects of the world of

sense; but in order to achieve its end it must of necessity objectify itself in matter. Matter, unable to avoid the humiliation of being used as a weapon against itself, is yet enabled to exact its price. And the price is that the current of life that is objectified in matter is by the very fact of objectification partially cut off from the main stream, the matter interposing, as it were, a barrier between the individual current and the universal flow from which it takes its rise. In virtue of this separation the current of life that 'gets through' into the individual material mould, acquires a freedom and a spontaneity of its own, in virtue of which it may pursue a course different from that of the main stream, a course, in other words, other than that which we may suppose it has been created as an individual to follow. Like the inhabitants of Plato's sensible world it will partake not only of the qualities and character of the informing spirit of which it is a manifestation, but also of those of the material setting in which the spirit is made manifest.

In respect then of *some* of its actions and characteristics we may say that the mode of their interpretation is to be sought not in the vital principle itself but in the material setting which, interposing between the individual and the vital principle, confers upon the former the ability to choose its own direction and to develop along its own lines. So when a river meets a line of rocks, it is split up into innumerable separate channels; the water in each separate channel is still the water of the main river, yet the course which it pursues is different, being determined by the conformation of the rocks which first separated it from the main stream. This course may be regarded as being in a very real sense its own. So it seems to me that we can say of each individual monad, that, while its energy and life are derived from a universal flow of life, the use which it makes of it depends in part upon itself. The individual, in other words, is endowed with the gift of freedom and choice by that very matter in which his individual spirit is objectified; in virtue of its interposition his course is set apart from that of the main stream, and he is enabled to pursue it in independence not only of other individual units but also of the main flow of life itself.

But the independence is only partial; for although the interposition of the barrier of matter debars the Life Force from complete control of its individual manifestations, yet it must be remembered that it remains their informing principle; it is still that by and through which they have their being. Were it not for the existence of the obstructive principle, the fact of individual free will would be inexplicable; yet, unless we are to assume free will,

the errors, difficulties, degradations, and antagonisms of individual organisms are themselves inexplicable. But it does not follow from this that life has no control over its individual units. Not only are they restricted in act and will by the limitations of the current of energy with which it endows them, but it has succeeded in evolving a series of devices to ensure that the course which they follow shall be in the main such as will further its purpose. Of these devices the most important is that of the great man or genius, whose significance I shall consider in the next chapter.

APPENDIX TO CHAPTER IV

THE PRACTICAL IMPORT OF VITALISM

A NOTE may perhaps be added on the practical import of this philosophy, so far as we have yet carried it. Many vitalist systems, following Schopenhauer and Von Hartmann, have issued in some form of pessimism. Under the guise of the Will to Live life has been envisaged as the source of a continual stream of desires. The enjoyment attending the satisfaction of any one of these desires is short-lived, and is immediately succeeded by the sting of another desire. Desiring implies a state of want or need which urges the individual experiencing it to activity designed to allay the need. Thus the life of the individual is a more or less continuous state of desire which is unpleasant, broken by occasional spells of fruition which are disappointing and transitory. Even if we contrive by luck or management to satisfy each of our desires as they occur, we succeed only in achieving a state of bored satiety in which nothing appears desirable. For, if pleasure is conditioned by preceding need, so soon as the need is satisfied the pleasure disappears.

As Schopenhauer says:

> Every act of willing starts from a need, from a lack, and therefore from a pain; it is therefore a necessity of nature that the creatures should be a prey to pain. But when Will comes to have no object, when prompt satisfaction removes all motive for desire, they fall into emptiness and weariness. . . . Life then swings like a pendulum from right to left, from suffering to weariness; and, in fine, these are the two elements of which life is composed.

Now, if we regard life as a balance sheet in which pleasure figures on the credit side and pain on the debit, we must, I think, agree with Schopenhauer that it is a failure. Taken as a commercial speculation in pleasure and pain, life must be judged an unprofitable undertaking. But it is by no means clear that a vitalist philosophy commits us to this attitude. If we may regard ourselves as expressions of the Life Force, created by it for the performance of a definite purpose, we shall find in the fulfilment of that purpose not only a justification of our existence, but such happiness as belongs to our condition; that is to say, as much as is good for us and as much as we have any right to expect. Thinking of ourselves as the tools or weapons of a force or stream of life, which evolves of necessity in and through those individual expressions of itself which are living organisms, we cannot but

recognize that the purposes which through us it is seeking to fulfil far transcend in importance the happiness or unhappiness of the individual organisms in which it temporarily objectifies itself, and, what is more, that while both the happiness and the unhappiness of individuals are irrelevant to the fulfilment of these purposes, neither can be suffered to impede it.

It is not then by reference to our personal pleasures and pains, nor even to our hopes and despairs, that the success and the worth of life are to be judged. Is then the life of the individual of no importance in the cosmic scheme, and matters it not at all how that life is conducted? Very much the contrary! In discarding purely individualistic and self-regarding standards of valuation, we are far from rejecting the possibility of any standard. For, if the individual is an expression of the Life Force, created for the furtherance of a specific purpose, it follows that his success in life will be determined by the measure of his achievement in fulfilling that purpose.

In defining the individual as a temporarily isolated expression of life, endowed with a measure of free will, we have placed the responsibility of living his life rightly upon the individual's own shoulders. It is clear then that the word 'rightly' will not necessarily be devoid of meaning, and we must try to indicate very briefly what sort of meaning we attach to it.

The individual is within limits free; he is also self-conscious, aware of his freedom and able to use his reason, to gratify his desires, to defend his conduct, and to justify his pleasures. He may use and indeed has used it to find perfectly good arguments for every conceivable course of conduct and for its opposite. This freedom and this self-consciousness are at once his glory and his danger. They are his glory, since by thought and effort he may achieve an ever higher degree of self-consciousness, an ever wider scope of vision, and, expressing life as life would wish to be expressed, raise the spirit to heights hitherto unattained. They are his danger, because on the one hand the individual may come to take precedence in his own estimation of the universal life of which he is an expression, and in the interests of self-development, to regard the satisfaction of his individual needs and desires as the purpose of existence; while on the other he may over-emphasize the universality of the spirit of which he recognizes himself to be a part, forget that he is an individual, created in order that by means of his individuality he may fulfil a purpose, and seek to cut off the source of that individuality by reabsorbing himself in the unity of the spirit with which he feels himself to

be continuous. The first course leads to sensuality, the second to asceticism. Each is a frustration of the purposes of life as we have imagined them, two rocks between which the individual should steer an even course.

The man who forgets the universal in the individual will not only regard self as the centre of the universe but will come to think of the universe as having for its sole function the placing of himself in its centre. Bringing all existence to the test of its ability to minister to his individual desires, he will fashion the universe upon the model of his needs, and devoid alike of the will to subordinate self to a moral ideal or the capacity to lose it in an external interest, will barter all the richness and variety of the world around him for a shade of feeling or a thrill of pleasure. He throws the huge sprawling image of his Ego across the universe, and his vision, blinded and darkened by the shadow of its looming, denies the validity of all that lies beyond it. A universe the centre of which is a state of feeling and the circumference a set of desires, is neither an exciting nor even an interesting place; nor are those who define the object of existence in terms of self-satisfaction noticeably successful in attaining the satisfaction they value. A life devoted to the satisfaction of self is a tired and a tiring life, and the wretchedness of men and women who have found it intolerable from lack of occupation far exceeds the misery of those who have been miserable from an overplus of tasks and duties. There have been more suicides from boredom than from overwork. The reason is not far to seek; it is, indeed, as old as Aristotle, in the Tenth Book of whose *Ethics* is contained an account of the nature and origin of pleasure, upon which philosophy has yet to improve.

If you set out to pursue pleasure directly, she will elude you. A coy and a contrary mistress, she will consent to come only when she is not summoned. Surrender all your energies to a task, devote all your enthusiasm to a cause, sacrifice yourself for what you conceive to be a duty, and on looking back you will find to your surprise that you have been happy. Make the pursuit of pleasure the end of life, and the desired pleasure will turn to dust and ashes beneath the touch.

It is for this reason that hedonistic cults, so attractive on paper and eagerly embraced by the young, are abandoned in disillusionment and disgust when put to the test of experience. A slight acquaintance with ethical systems reveals to the student of philosophy the arbitrariness of moral standards, and the baseless and divergent dogmatisms of ethical philosophers; a short training in argument enables him, by joining the sophists, to dispose of the

standards of his predecessors. Having passed the rapier of his newly-acquired dialectic through the ribs of a few lay systems and let out some bran and a little sawdust, having knocked the bottom out of moral obligation and dethroned the categorical imperative, the young philosopher proceeds to enjoy himself without qualm or scruple.

Believing that the only way to get rid of a temptation is to yield to it, he surrenders his mind to every credo that may tickle the reason, and his body to every pleasure that may enthral the sense; holding that not the fruits of experience but experience itself is the end of life, he withholds himself from nothing that will afford a new emotion, provoke a sensation hitherto unfelt, or cause him to thrill to the pulsing of a more exquisite excitement. Striving to burn with that 'hard gemlike flame' recommended of Pater, he will seek in art and sensationalism the means to keep his experience always at white-hot intensity, and treating his body as an Aeolian harp, will play upon it for the evocation of novel and exquisite harmonies of sense or feeling. Unimpeachable in theory, the doctrine fails somewhat unexpectedly in practice. The recipe for the production of pleasure does not produce pleasure. Servitude to the senses is found to be a more burdensome and exacting form of slavery than servitude to conscience, and Schopenhauer's laments over the boredom and satiety which are the only alternatives to the pain of unsatisfied want are discovered to be justified. It is found, in short, that the way to obtain pleasure is not to seek her. Pleasure, as Aristotle puts it, is like the bloom on the cheek of a youth in the perfection of health at the height of his powers; it is a something added, an essence that is distilled only when a fine thing is functioning in the way appropriate to its nature, a fragrance that attaches to things that are good when they are being good.

We should seek, therefore, to cultivate our powers not for their own sake, but in order that we may increase our effectiveness as living beings, exerting ourselves to the full in those directions in which our natural gifts, improved by training, can be used to the greatest advantage. Not only should we work, but we should work at that which we can do best. To recognize his limitations is said to be the mark of a genius; the recognition of his gifts is his distinction. Our *métier* once discovered, our pleasure will be found in its unremitting pursuit, but found only if not sought. To do things because you want to do them will bring pleasure; to do them because they will bring pleasure, will bring not pleasure but boredom.

If the satisfaction of self fails to yield a good life when it becomes the motive of our action, the cultivation of self is equally barren when the self is treated as the object of our interests. Men have believed that absorption in self, whether in the interests of self-development or of self-devotion, is the end of life; this belief is a delusion. Concentrate upon the self as an object of interest and you will find it dull and unremunerative. The self is like virgin soil; in order that it may bear fruit it must be harrowed by suffering and activity, and sown with the seeds of intercourse and knowledge. We should turn outwards to find our interests in the external world, not inwards to concentrate upon our needs and feelings. Watered by experience, crossed with the minds of others, fertilized with the ideas of the wise and the good, the soul blooms and bears fruit; but if, sheltered from contact with the external world, she is made the object of introspection, she grows barren and withers, losing interest and value even as an object of introspection. The most interesting personalities are those least interested in themselves; the meagre and the narrow, the barren and the dull, are those who find in the contemplation of their own states of mind and in the satisfaction of their own feelings the *raison d'être* of existence.

But if sensualism merits blame for its indulgence of self and the undue emphasis which it places on individuality, asceticism with its creed of self-abnegation is no less censurable. Nor is it superfluous to point out its dangers. Those vitalist philosophers who have rejected the conclusions of Schopenhauer have too often followed Shaw, and seen in the growing subordination of body to mind a proof of the advance of evolution. Belief that the complete domination of matter by mind may ultimately prove to be the end of evolution by no means commits us to the view that it should be aimed at as its present objective.

Men have turned ascetic for various reasons; some, in the interests of the intellect, or, as they have preferred to call it, the spirit, have mortified the flesh which seemed to them to war with the soul; others, under the influence of religious sentiment and the doctrine of original sin, from repugnance to the body which they have regarded as the seat of wickedness and the abode of Satan; others again, because conscious of their communion with a spirit, which they felt to be the very breath of their existence, they have sought to realize a closer unity by transcending the body which they conceived to be a barrier and a source of separation.

But, if we are right in regarding the objectification of the Life Force in a material mould as a necessary and inevitable step in the

process of its development, it is clear that we do not further its purposes by seeking to pass in spirit outside the mould and to emancipate ourselves from the limitations it imposes. To subdue the flesh may be to refine the spirit, but the time is not yet for such a refinement of the spirit as the ascetic proposes, still less for the complete freedom from the limitations of matter attained by the mystic. I shall return to this subject in a later chapter in connexion with the phenomena of mysticism and of aesthetic enjoyment.[1] For my present purpose it will be sufficient to urge, at least upon those who are not mystics but common men, an unprotesting acceptance of our bodies and of all that they imply, based upon the realization that it is by utilizing them in the service of the spirit rather than by suppressing them in order to achieve a closer union with the spirit, that we shall best serve the cause of life. In saying that we must accept the body, I mean that we must be prepared to do justice to those instincts which, through our association with the body, we possess in common with the animals. It is from these instincts that we derive our energy and draw our vital force. They are the necessary basis of any structure that we may raise upon them; they determine the pattern which life has traced for us, and we mutilate them at our own peril. It is of such mutilation that I conceive the ascetic to be guilty. He would strive to subdue the body and the instincts of the body as though it were the enemy of the soul, from whose humiliation the soul would reap the benefit. The better course is surely that of Plato, not subjugation but discipline; not, that is to say, to trample upon the forces of our animal nature, refusing to avail ourselves of the energy and passion which flow from them, but by harmonizing them one with another, to dedicate them to the service of a dominant purpose, which is the good of the whole. So utilized, they may be of inestimable benefit to the mind itself. An intellect that is divorced from the interests and affections of common men is apt to be dry and pedantic; it becomes a logic-chopping machine engaged in the elaboration of systems which have no contact with life and no relation to fact. More than this, it may suffer from the distortion of a definite bias. You cannot starve one side of your nature and expect to produce no effect upon the rest; and to see life steadily and to see it whole we must be whole men and women. If we are less, if we have achieved a supremacy of intellect or will and drained ourselves of blood and passion in the struggle, our outlook upon the world will reflect the partiality and lopsidedness of our natures.

[1] See Chap. IX, pp. 409, 410.

On the positive side there is more in the recommendation to cultivate a healthy mind in a healthy body than that health is a good thing, and that it is better to have two good things than one. For the healthy body rightly utilized may strengthen and enthuse the healthy mind. It is this, I take it, that Plato had in mind, when he said that the spirited element in the soul should be allied with and harnessed to the rational element. We should, that is to say, enlist the humours and energy of the body in the service of the mind. Mr. G. M. Trevelyan has coined a phrase in description of the soul, which exactly expresses the view that I am trying to put forward. He speaks of it as 'the flushing of the brain with the blood, of the cold intellectual with the hot animal'. It is the soul so conceived, a blend of mind enthused by passion, and of passion inspired by mind, that we may perhaps regard as the highest type of emergent which life has hitherto succeeded in evolving. It is not in terms of massiveness and force of intellect alone that we must assess the advance of life in its evolution to heightened powers and wider vision, but of a compound of faculties in which the mind in the narrow sense of the word, while remaining directive and supreme, is quickened and sensitized by the forces of the body. It may well be that to a right understanding of the universe something other than intellect is required, that it is this something more which it is one of the immediate objects of evolution to achieve, and that for its emergence the utilization of the instincts and energies of what is called our animal nature is a necessary condition.

It is, then, to no warring of spirit with sense that, as I conceive it, the philosophy of Vitalism points the way, but rather to a harmonious development of each as a prelude to the emergence of what is higher than either; a life in which body as well as mind, instinct as well as thought, receive their due, a life harmonious and full in which no one faculty is subordinated to any other.

Those who steer an even course between the whirlpools of sensualism and asceticism will of necessity embrace as a practical guide the doctrine of the mean.[1]

If we are to regard the different faculties and parts of our being not as antipathetic but as complementary, if the health of one part is in some sense dependent on the health of all, we must give to each and all their proper exercise: to the body not asceticism but athletics, to the brain not meditation but work, to the emotions

[1] Another ideal appropriate to an exceptional type of man is indicated in Chapter IX. I am here speaking of the ordinary man whose function is to maintain life at the level at which he finds it, and to carry it a little way forward.

not atrophy but discipline. For the rest we should obey all the demands of our nature, yet let none command our nature. We should not only know where to stop; we should learn to stop while we still wish to continue. Thus will all our faculties be kept at cutting edge, and our tastes remain fresh and unsated.

For a guide to the demands of our nature we should refer to the pursuits of our fathers. For what mankind has done uninterruptedly for thousands of years we may be assured that there is a natural itch in the blood. In all ancestral and customary pursuits, then, we should indulge, but in none of them overmuch. We should pray a little, fight a little, play a little, dig a little in the ground, and go on the sea in ships; we should make love, speak to our fellows in public, and expand in the company of our friends in private. Above all we should recognize that we have an instinctive desire for occasional solitude, and a need for country sights and sounds. Of this desire and of this need we may not be conscious, yet none the less are they instinct in the blood; they are needs which the conditions of modern civilization render hard to satisfy, yet unless satisfaction is found for them, the development of the man as a whole will suffer and symmetry will be lost. Symmetry, poise, and balance: these are the marks of the fully-developed man, and they will not be achieved by neglecting the unconscious needs of his nature.

To the exhortation to develop every side of our natures I should like to add the qualification that we should develop them not in isolation but together. Our faculties are not allotted by nature to watertight compartments, although they may be so relegated by practice. The best of them are always blends, emergent upon a combination of less-developed constituents, love upon sentiment and lust, wit upon humour and sense. We should bring to our playing all the cunning of the mind, and to our thinking all the passion of the body.

We are advised, then, not to make a god of individuality on the one hand, nor, on the other, to seek to submerge it in the universal. We are not, through impatience or cowardice or self-indulgence, to cut the bond that binds us to life, nor through resignation or slackness to seek to renounce the struggle that our individuality implies. We have been created for a special purpose, to make of our lives the best we can in the world as we find it. It is the world around us that is the background against which our evolution must proceed; it is here that our lot is cast for good or for ill, and it is here that our interests should be.

It is not, then, by regarding this world as a vale of tears and

suffering, a temporary habitation of the spirit whose real home lies elsewhere, that we shall do our duty, nor, if the consolations of religion achieve their end by belittling the significance of what happens here in comparison with the transcendent importance of what awaits us elsewhere, shall we be wise to avail ourselves of the comfort they bring. Such comfort destroys our sense of the importance of the actual, and paralyses effort; it is an endeavour to support our dignity under the realization of our own insignificance, by assuring us of the equal unimportance of our admired fellows and of the world that makes much of them. This is an easy doctrine, at once a snare and a justification for the slack and the comfortable, bidding them take not overmuch thought for the present, because of the imminence of a heavenly future. In opposition to it I urge that the present does matter here and now; that we matter in it in a sense in which we shall never matter at any other time or place, and that we exist in the present for the performance of certain purposes, which will be furthered neither by an indifference to the calls and needs of the world as we find it, nor by an attitude of resignation to the evils with which a hypothetical Providence may have thought fit to surround us. We are here to remove those evils.

But if we refuse to belittle our existence in the present because of the importance of an imagined life in the future, we shall equally reject a fatalistic attitude which destroys hope and saps effort by assuring us that we are helplessly entangled in the web of destiny. It is of the very essence of our belief that life is free and changing; it is not an incidental and unimportant offshoot of matter, but an independent principle controlling matter and moulding it to its purposes. Life, then, is the maker of its own destiny, nor is there any other principle in the universe that can interfere with its accomplishment; neither a brooding and ineluctable fate, nor a capricious and irresponsible chance. Fail we may, but we shall fail because life is inadequate to its task, not through the interference of a power that overrides or transcends it. We are not strangers straying naked and forlorn across an alien environment, mere targets for the shafts of doom, nor are we puppets twitched into love and war by an invisible showman, indifferent alike to our weal and woe, who pulls the strings, but servants and messengers of life, created by life to carry aloft the torch of evolution, entrusted with a charge which it lies with us to neglect or to fulfil.

If I am right in what I have said of the dangers of sensualism and asceticism, we neglect this charge at our peril. Its fulfilment depends upon effort and achievement in the present. We should,

then, strive to make the texture of our lives one of unremitting effort. If I were to seek for the most appropriate human activity to illustrate my conception, it would be the activity of man as a mountaineer. We should struggle always even if, as Meredith puts it, 'we should only struggle to be wise'. But though ours is a steep upward path, there is no peak in sight; nor is it in the achievement of a goal but in the effort we make towards it that we carry forward the purpose of life.

Effort is what is valuable; but, and this is the paradox which besets us, it is valuable only if it is not valued. Just as, when we make pleasure our end, we find that nothing pleases, so, if we make effort our aim, we find that no effort satisfies. First and foremost we must desire things, both material and spiritual, and strive to obtain them; on reflection we may admit, and as philosophers we must insist, that it was not what we wanted that mattered, but the effort we made to get it; yet if such an admission were entertained for one moment in the heat of the struggle, it would blight our endeavours and take all the savour from our success. We must, in a word, be busy, not because 'busyness' is a good, but because (and this is what we may not realize at the time) it is the condition of other goods being added to us; so true it is that the only way to avoid being miserable is not to have leisure enough to know whether you are happy or not.

According to the view put forward in this chapter we are free; free, within limits, to make of our lives what we will. But though we may go the way we choose, the Life Force has pointed out to us a way of its own, and we shall be well advised to follow it. There are signposts on the way of life, and our satisfaction is dependent upon our taking the course they point. This course, however it may vary from individual to individual, will always be found to involve unremitting effort in pursuit of those aims and ideals which as conscious individuals we find on reflection to be valuable. Seeking neither, on the one hand, to thwart the purpose of life in objectifying itself in individual forms by denying our individuality in order to reabsorb ourselves in the universal spirit, nor, on the other, to subordinate everything to the development of self by enthroning it as legislator to the universe, we shall find poise and sanity in a life of effort. We should give all sides of our nature their due, but we should do this not in the interests of self-development, but in furtherance of a life given to the pursuit of external things and the cultivation of objective ideals. We do not rightly begin to live until we forget ourselves, and learn to look not inwards upon the self, but outwards with all the eyes of the

soul. We should strive, therefore, to lift ourselves up out of the selfish little pit of vanity and desire that is the self, by absorption in something greater than the self. Taken as individual units we are little nervous clods of needs and ailments; taken as expressions of the Life Force we are the advance guard of evolution, whose mission it is to carry life to a higher plane of development than any that has yet been reached.

CHAPTER V

THE INSTRUMENTS OF LIFE

'Genius is a flame which comes from heaven, but seldom finds a head ready to receive it.'—NAPOLEON.

I. THE SIGNIFICANCE OF GENIUS. *Introductory.*

IN the preceding chapter I have suggested that higher qualities of mind emerge through the endeavour of the individual monad to overcome the limitations imposed upon it by its temporary material mould. I have also suggested that by reason of this material mould the individual enjoys a measure of freedom and self-determination. I now proceed to examine the suggestion that the Life Force tries to stimulate and direct the development of individual monads by certain devices, of which the most important is the creation of abnormal individuals known as geniuses. I wish to deal with the phenomenon of genius at some length, because in raising as it must do questions of literary and aesthetic value, it brings me to the theory of literature which I wish to advocate, a theory which in its turn leads on to the question of the status and significance of art in general. Art—and by art I mean music and painting and sculpture—seems to me in its nature and function to be radically distinct from literature and poetry. My thesis is that the artist, as distinct from the writer, is interested in the things of this world not for their own sake, but only in so far as they reveal the world of reality, the consideration of which will occupy us in Part II. It is to this world that for most of us art constitutes the main avenue of approach. Since, however, both painting and sculpture may illustrate a story, and must deal with the world of sense, it may seem a paradox that I should constantly throughout this chapter contradistinguish them from literature. For the resolution of the paradox the reader is asked to wait till the next chapter.

Given the fact of individual free will, it is obvious that some 'devices' are necessary if the Life Force is to counteract and overcome the purely self-regarding and separatist tendencies which its exercise engenders in the individual. Through the pleasure of sex it secures the continuance of the species; with the spur of need it stimulates to effort, and with joy it rewards achievement. It is only through endeavour that satisfaction is to be found, and

boredom and satiety deter the wise from a life of pleasure-seeking and self-indulgence.[1]

It is, I think, permissible to regard what psychologists call 'the unconscious' in the light of another of these devices. It serves to disguise from us our real status as units of an all-pervading force of life, and to create the illusion of complete autonomy. The unconscious with which modern psychologists have made us familiar is the originator of instinct, the seat of desire, and the fount of inspiration. In it lies the source of our conscious wishes, and realized thoughts; from it we derive the energy with which we pursue them. Many writers go farther and attribute the causation of all conscious processes to the unconscious; we are, for many psychologists, as completely determined by forces within us whose genesis escapes detection and whose working evades control, as we were fifty years ago by the material forces of nineteenth-century physics. I do not subscribe to this somewhat extreme position; it is sufficient for my purpose to adopt the comparatively moderate view that regards the unconscious as the seat of instinct and the source of desire. Instincts may be diverted and desires rationalized, so that we may be able to give perfectly good reasons for our wishes and our actions; nevertheless, for the prompting of instinct and the fact of desire we are not responsible. They occur independently of our will, nor can they be created by our will. When instinct is sublimated, as it is in the artist, it reveals this fundamental characteristic of irresponsibility, the artist and the poet being driven to create by a process within themselves, of which they can give as little account as the youth who is surprised to find himself in love. Now it is, I suggest, through the unconscious that the individual maintains contact with, and derives energy and inspiration from, the main stream of life, the Life Force, of which he is but a temporary expression. Hence, when the Life Force wishes to direct and control the evolutionary movements which is effected through the agency of individuals, it is through the unconscious that the regulation is achieved. The Life Force we may imagine as seeking to initiate and control the actions of individuals by a continually-recurring series of inclinations and promptings. These promptings subsequently appear in consciousness as explicit desires which the individual, in ignorance of their origin, proceeds to carry out in the full conviction of his complete freedom of will. By this means the Life Force is enabled continually to urge the individual in the direction in which evolution

[1] See Appendix to Chap. IV, pp. 209–11, for a discussion of the significance of these facts.

must advance, yet contrives that he should remain in ignorance of the source of the impulses which he fondly imagines to be his own.

That this hypothesis is too speculative to be of much philosophic value must be admitted; it implies a degree of conscious purpose, even of personality on the part of the Life Force, which I do not wish to claim, and in putting it forward I have been driven perforce to use language which in the crude anthropomorphism of its suggestion goes far beyond what I would wish. I hazard this conception of the function of the unconscious chiefly as an illustration of the sort of meaning I attach to the word 'device', when I speak of the devices evolved by life to ensure the furtherance of its purpose in individuals. Strictly, perhaps, I should confine myself to the assertion that Life is a purposive stream or tendency and that it functions through the unconscious.

1. *The definition and function of genius.*

Having ventured so much by way of illustration I pass to a consideration of the significance of genius. I have attempted in the previous chapter to describe the development of life through emergence, suggesting at the same time that mind was only the latest level in a series of emergents that begins with the most rudimentary forms of unconscious life. This being so, we may expect that the mode of development exhibited by the earlier emergents of life will be paralleled by the development of mind. The evolution of life as observed by biologists appears to be due to the occurrence of variations in species, and seems to be now generally agreed that in the initiation of new species the small and gradual variations emphasized by Darwin play a less important part than the sudden marked variations or mutations to which De Vries first drew attention.

I suggest that the advance of mind proceeds by the same method, and that although there is a continual development by means of small variations (the enrichment of each successive manifestation of life by the acquisitions of previous individuals described in the last chapter), the immediate cause of the emergence of new thought, like the immediate cause of the emergence of a new species, is the appearance of a 'sport' or 'mutation'. To a 'sport' or 'mutation' at the mental level we give the name of genius. The genius is a manifestation of life at a higher level than that which has been reached in his contemporaries; he is, therefore, a forerunner or prophet of the next level or levels at which life will emerge in the race as a whole, forming, as it were, a bridge between the level which has been and that which is to be evolved.

Translating this statement into the formula given in the third chapter, we may say that his awareness of the universe is both subtler and deeper than that of his contemporaries. He will be aware of more things [1] of the same sort as those of which his contemporaries are aware, he will be aware of new relations between these things, and he may also be aware of things of a different sort. His awareness of things of a different sort will form the main theme of Part II. For the present we are concerned with the capacity of the genius for seeing more things which are fundamentally of the same sort as those which his contemporaries see, and for seeing new relations between them. As I maintained in the third chapter, thought is the awareness of subsistent objects and of the relations between them. Therefore the genius may be defined as an emergent 'sport' at the mental level, gifted with the capacity to become aware of subsistent objects hitherto unobserved, and to discover new relations between subsistent objects already observed. In other words, he brings new thought into the world.

It may be asked how far the emergence of the genius thus defined constitutes a conscious and deliberate experiment on the part of life. The answer raises the difficult issue of the purposiveness of life which was discussed in the last chapter. Assuming the view there suggested, that side by side with the general advance of life as witnessed by the evolution of higher emergents, there is a growing consciousness on the part of life of the process and purpose of its own evolution, and that it is in terms of this growing consciousness that the development of life must in part be measured, we may imagine the emergence of 'sports' of all kinds, and of the genius in particular, as the expression of life's conscious effort to rise above itself in the furtherance of its own instinctive purpose.

It is not indeed essential to this view of genius that I should insist on this degree of purposiveness. Life in any event develops, because change and development are of the essence of its being; development, as we have seen, takes place in and through the individual manifestations of life which are living organisms, and it may be that the sudden advance by the 'sport' above the level already registered by the rest of the species is merely a natural law of organic growth. In this event, then, 'the creation of genius by the Life Force' will bear witness to the operation of conscious purpose neither more nor less than the growth by the individual of his hair and his nails. It will nevertheless remain a fact that the

[1] 'Things' mean sense data, subsistent objects, and the relations between them.

genius performs the function which I propose to describe, even if its performance is not so much part of a plan deliberately conceived as a natural and inevitable law of vital development.

At the same time the view of the genius as a device of the Life Force to give conscious expression to its instinctive purpose, a signpost to living organisms indicating the road along which they are next to travel, is one to which the records of individual geniuses and of their reception by the world bear striking testimony. If we adopt this view, we shall regard the genius as a peculiarly vivid and direct expression of the Life Force, which uses him as the vehicle of a message which it seeks to convey to its own individual units. He is 'a chosen vessel'.

It is on these lines that I shall interpret the phenomenon of inspiration, which is so frequently invoked to account for the utterances of prophets, seers, and poets. That all creation, whether in art or thought, is the expression in us of some force or principle of which we can give no account whatsoever, must, I think, be allowed. The poet and the reformer, the prophet and the seer, would seem to be inspired by a message to which they are forced to give utterance whether they will or no. Following the light that is in them, they face obloquy and shame, starvation and neglect; knowing that these things await them, knowing, too, that by exploiting their talent and consenting to perform the work which the world requires, they may command fame and success, power and riches, they yet reject the rewards that ordinary men hold dear, and insist at all costs to themselves on doing the work that they have been sent into the world to do. That this is the course which great men have followed with significantly few exceptions, is, I think, sufficiently well established.

In suggesting, then, that the genius must be accounted a man possessed, writing and speaking, despite himself, under compulsion by a power which he can neither escape nor control, I am merely making explicit and viewing in its proper significance the commonly accepted view of his nature. The genius, we say, is responsible neither for the work he does nor for his efforts to do it. He writes what he must, not as a free agent but as a chosen vehicle for the manifestation of that which animates and yet transcends him. Nor is this theory of inspiration incompatible with the generally admitted fact that the bringing to birth of what is new, whether in the world of thought or of art, is accomplished only by hard and unremitting labour. The genius may be a vehicle of inspiration that comes unsought; but it is only through toil and sweat that his inspiration finds expression in concrete form.

A good deal of research into the conditions attending the process of creation has been carried out by psychologists in recent years, and many of those who have done creative work of a high order have been induced to recount their experiences. An interesting summary of this research will be found in Professor Graham Wallas's book *The Art of Thought*.[1] He distinguishes four stages in the process which goes to the making of a new generalization, the discovery of a new formula, or the poetical expression of a new idea. The first is that of Preparation, during which a particular problem is investigated in all directions; the second, that of Incubation, during which no conscious thinking is done in connexion with the problem or work of art with which the creative thinker or artist is concerned; the third, consisting of the appearance of the 'happy idea' together with the psychological events accompanying that appearance, is called Illumination; and the fourth, embodying the working out and application of the idea in thought or the execution of the work in art, Verification. As the Psalmist puts it, more briefly, 'While I was thus musing the fire kindled and at last I spoke with my tongue'.

Particular stress is laid upon the importance of the 'musing' as a preliminary to the 'kindling'. Professor Wallas speaks of the many men of genius who have done their best work after a period of idleness.[2] Complete mental and physical relaxation which often finds vent in day-dreaming is perhaps the most fruitful condition for the production of creative work. Too often, the creative genius, spurred by ambition, constrained by the force within him, or driven by economic necessity, has denied himself the period of idleness which is necessary for his best work. Great works of genius have, it is true, been produced in a hurry; but more often the genius who compels himself to exertions for which he has no present inclination falls below his best level. Havelock Ellis gives examples of men of genius who have only been able to get a sufficiency of relaxation through a disposition to idleness, which has been severely reprobated by their self-respect and against which they have vainly struggled. Sometimes the Life Force seems to have taken the matter into its own hands and ensured that the creative thinker shall enjoy the idleness necessary for the fruitful working of the spirit within, by plunging him into those fits of lassitude and despondency with which the records of genius are chequered.

All the evidence seems to be in favour of the view that the

[1] Chap. IV, especially pp. 79–101.
[2] Wallas, *The Art of Thought*, pp. 88–91.

'happy idea', the 'kindling', the force and originality of which distinguish the genius from the ordinary man, proceeds from the unconscious, and that a certain relaxation of the more exacting activities of consciousness is required in order that the unconscious may outcrop. Not that the absence of effort of all kinds is by any means a *necessary* condition of the manifestation of what is new. Goethe while riding a mule over the Gemmi pass, and Wordsworth while walking over the Simplon, were both 'musing', if we are to judge from the work that followed. Yet we may well doubt whether an increase of physical effort up to the point at which it becomes intense physical strain, as, for example, in the case of the modern Alpine party ascending a peak with rope and ice axe, is not inimical to the activities of conscious and unconscious alike, so that, for the type of the physical activity most compatible with and conducive to Incubation, we should probably be safe to take Helmholtz's 'slow ascent of wooded hills on a sunny day'.

The view of the unconscious here implied as the source and origin of the 'kindling' of the genius is in accordance with the theory of M. Geley, discussed in the last chapter, which assigned to the unconscious the location of supernormal powers. Following M. Geley we looked to the unconscious as the source of those faculties, clairvoyance and telepathy, which are usually manifested only on extreme and perilous occasions. The 'fire' which distinguishes the genius, a 'fire' which we have translated in terms of vision, as a faculty for seeing what was never seen before, must, I think, be ranked with these supernormal powers of the ordinary man; like them it springs from the unconscious, and like them it is beyond conscious control and power of evocation. I say that the origin of the new idea in which the 'kindling' consists is to be found in the unconscious, in order to emphasize the fact that its inception is not a conscious process; it comes we know not whence or how; all that we know is that we have it. But its true origin should be sought in the Life Force itself. As I said a few pages back, the unconscious is that aspect of our being through which we may conceive ourselves to be most directly in touch with the Life Force. It is the unconscious that beats with the pulse of life, and is subjected most directly to its continual thrusting and prompting, so that the impulses and desires of which ordinary men and women are conscious, and to which they give effect in action, may be said to own a source in life itself (subject to distortion by the obstructive principle of matter which we have already described). The notion of the 'kindling' of the genius as preceded by a period of 'musing' in which the unconscious may

be presumed to have free play, resulting in the emergence of the new idea in consciousness, is, therefore, merely an extension of the process which we have already envisaged in ordinary individuals.

It is indeed clear from other indications that the process is the same. The ordinary man who, faced with a practical problem to solve or a difficult issue to decide, feels that he must 'sleep on it', and wakes in the morning with the decision made or the solution clear in his mind, is asking his unconscious to do for him the work with which his consciousness is overtasked. Nor is sleep the only way; many men who find a piece of work difficult or wearisome have learned to put it aside for a time and to busy themselves with something else, knowing by experience that they will return to it not only with renewed energy but also with fresh ideas. Provided that we have learned how consciously to dismiss our difficulties from our minds, we may rest assured that the unconscious will busy itself with the problems that consciousness sets it, and, if we are fortunate, will in due course present us with the elements of the answer ready made. The case of the genius is thus only an extreme example of a common experience.

Nevertheless—and here I return to the point from which I digressed—the functioning of the unconscious is conditioned only by a process of intense effort on the part of consciousness. The theory of unconscious inspiration is no substitute for conscious endeavour; rather it is the complement of such endeavour. All geniuses have been tremendous workers, and it is in the capacity for prolonged and concentrated effort as much as in the fruitfulness of the 'kindling' which succeeds it, that genius consists.

M. Henri Poincaré, in his book *Science and Method*, describes the process of Incubation, a process in which no mathematical thinking was done, which preceded two successive stages in his mathematical discoveries; but he is careful to point out that in both cases Incubation was preceded by a Preparation stage of hard, conscious, systematic, and unsuccessful exploration of the problem. In both cases the final idea came to him 'with the same characteristics of conciseness, suddenness, and immediate certainty'.

Plato said that practice in the exact studies of weighing, measuring, and counting is a necessary preliminary to the apprehension of the Forms, a point to which I shall later on have occasion to refer at greater length in connexion with the phenomena of mysticism. For the present it is sufficient to point out that in the scientist and mathematician training and study, and in the artist a thorough mastery of technique, have usually been found to be the indis-

pensable conditions of discovery and creation. Effort is necessary too in Verification or Execution. Here I may with advantage quote M. Poincaré again.

> It never happens that the unconscious work supplies *ready made* the result of a lengthy calculation in which we have only to apply fixed rules.... All that we can hope from these inspirations which are the fruit of unconscious work, is to obtain points of departure for such calculation. As for the calculations themselves, they must be made in the second period of conscious work which follows the inspiration, and in which the results of the inspiration are verified and the consequences deduced. The rules of these calculations are strict and complicated; they demand discipline, attention, will, and consequently consciousness.

The efforts of great artists in embodying their creations in concrete form, of Beethoven, for example, struggling to master and harmonize his own musical ideas, corroborate Poincaré's account. Mozart, it is true, is said to have composed his symphonies and operas by merely writing down the ideas which he had already worked out in his head; but this suggests only that the hard work of Verification was done at an unusually early stage. It is not, then, in the ability to dispense with effort and endeavour, so much as in the quality of the Illumination which springs from effort in the past and leads to renewed effort in the future, that the differentiating characteristic of genius exists. The quality of the Illumination, as I have suggested, is the fruit of the direct prompting of the unconscious by the Life Force, the conscious part of the process being confined to giving it concrete shape and form.

Drawing together the various threads of the preceding argument, I define the genius as one sent into the world to give conscious expression to the instinctive purpose of life. This he does by setting before his contemporaries a conception of truth, of goodness, or of beauty, which belongs to a level higher than that at which the general consciousness has emerged. This conception may take the form of a new code of morals, a new attitude to religion, a new vision of beauty in art, a newly apprehended significance in nature, a new view of man's relations to the State or to his neighbour, or a new conception of the fundamental character of the universe and of man's status within it.

In biology De Vries's mutation theory has made us familiar with the notion that life has advanced intermittently by sudden jumps, rather than gradually by slow stages. The emergence of each new species is in the nature of a jump, and the first to take the jump is the 'sport'. In attributing the advance of mind to the appearance of a genius who first makes a break with past traditions in his own

thinking, and then causes subsequent generations to follow in his train, I am merely affirming that mind advances in the same way as the organic life of plants and animals.

There is indeed good ground for regarding this process as inevitable. Mankind as a whole is not given to the initiation of what is new; moreover there is, as I have tried to show, no guarantee that the movement of individual monads will necessarily follow the main line of evolutionary progress. Assuming the possibility of human free will and adopting the view, put forward in the last chapter, of the interposition of matter as the ground of free will, we have no alternative but to regard man as endowed with the capacity to pursue his own individual ends, which may be unidentical with the evolutionary purposes for which he was created. The individual is, moreover, in my view, the expression not only of life but also of a contrary or obstructive principle in which the current of life is temporarily expressed; and we must regard him, therefore, as infected with the inertia characterizing the matter of which his body and brain are composed. In so far as he is the expression of a dynamic principle, he changes; but he changes slowly and uncertainly, and tends continually to lapse into inertia by sinking into the rut of habit and traditional behaviour. The Life Force, if its advance is to continue, finds it necessary to make continuous efforts to jolt him out of the rut, and the emergence of the evolutionary 'sport' with which I have identified the genius is the method chiefly adopted for the purpose. It follows that the genius must from his very nature violently and persistently challenge the accepted categories of thought, canons of art, or rules of conduct current in his age. This challenge is bitterly resisted at the time by men's natural disinclination to have their beliefs disturbed and their conduct questioned. Since, however, the message of the genius represents the next step forward on the path of life, it is only to be expected that the next generation will accept his ideas with as much enthusiasm as its fathers opposed them. Thus we build the sepulchres of the prophets whom our fathers slew.

2. *The function of Literature.*

The form in which the message of the genius is normally expressed is literature. Literature is, therefore, essentially didactic; the affinity of the writer being with the preacher and the prophet, rather than with the painter and the musician. Thus great literature will usually be found to be the vehicle of a message which is other than and in some sense opposed to the ideas of its readers.

The view of literature as didactic raises a number of controversial questions which I cannot pursue here. An adequate treatment of these questions would take me beyond the scope of this book into the realms of literary criticism and valuation. An attempt to illustrate my general thesis with particular reference to poetry, to which at first sight it would seem to be least applicable, will be made in the second half of this chapter. For the present I shall concern myself with literature in general as the normal form of expression for the genius, with the general characteristics of the literature which performs the function I have described, and with the nature of its reception.

It may seem to imply a somewhat narrow view of genius to restrict its expression to the spoken and the written word. What of painting, of music, of sculpture, and of architecture? My answer is that it is only genius as an instrument of life fulfilling the specific function of furthering the evolution of mind that I am considering in this chapter. Painting and music are also the work of genius, but, in this view, of genius of a different order, performing different functions and, so far as its immediate and deliberate purpose is concerned, impelled less by the drive of a world force seeking conscious expression than by the quest for reality. The significance of painting and music is therefore dealt with in the second part of this book.

On the other hand, literary enthusiasts will object to my attributing to literature as its function and *raison d'être* the furtherance of a didactic purpose. Literature, they will urge, is its own justification; its *raison d'être* lies within itself as a criticism or enhancement of life, or in the achievement of formal beauty. In answer to this objection it may be admitted that the position and status of literature as it is to-day affords little countenance to the view I am putting forward. But it must be remembered that the origin and early development of literature are considerably removed from its present function, which is, in the main, to please and to divert. The bridge between them is, of course, the parable. But even in its earliest and most didactic form, literature aspired to please as well as to edify. 'The Preacher sought to find out acceptable words.' [1] Literature developed naturally from two roots, prophecy and the recitation or singing of verses. It came into existence so soon as the art of writing enabled the utterances of the prophet and the poet to be recorded. Thus in its early stages literature naturally assumes the form of the moralizing proverb, the hortatory or denunciatory address, and the epic poem. The Old Testa-

[1] Ecclesiastes xii. 10.

ment, for example, contains all three forms strung together on a thread of narrative.

Now it is, I think, clear that if the genius is to get at the mind of the race at all, these are the methods which he is, at any rate in early stages of racial development, bound to adopt. In a world of peasants and tribesmen widely scattered and meeting at rare intervals, the mind of the race is far less accessible than it is to-day. There is little interchange of ideas, little or no mass-suggestion, while that coming together of people, which is the necessary condition of the birth of what we call the community spirit, is limited to occasions of attack or defence, when the emotions of fear, cupidity, or patriotism are dominant. The wireless, the cinema, the press, the political platform, and the thousand and one organizations by which men's minds are influenced and moulded to-day are all lacking.

The only feasible way of communicating ideas to a world at this level of development is through the spoken word of the teacher, the priest, or the prophet. Thus in the early stages of racial development it is mainly through the agency of the great religious teachers that the Life Force sought to indicate the direction of human development. And so from the very beginning of recorded history we find preachers and prophets going about among their fellows, urging them to abandon their evil ways and take to better things. It is a commonplace that the central teaching of all the great religions is the same: that hate should give way to love, vengeance to forgiveness, that enemies should be spared, the weak kindly treated, and the arts of persuasion substituted for brute force; by these and a hundred other precepts the great teachers have sought to purify and to elevate the mind of man. Christ, the greatest of these teachers, is primarily a preacher of conduct. He puts justice and mercy before ritual and ceremony, and lays great stress upon what men do; he advocates the widening of the private family to include the whole family of mankind, and denounces hatred and partisanship; he is a humanitarian, crying for mercy instead of vengeance and urging, if only as a utilitarian measure, the overcoming of evil not with a contrary evil but with good. He insists on the organic conception of society, implying that we are members one with another in so intimate a sense that the misery and degradation of one are the misery and degradation of all. Buddha preaches similar doctrines from a different standpoint, insisting more particularly on the achievement of self-mastery, the disciplining of the passions, and the following of a right way of life.

With the spread of writing, and still more with the development of printing, the written word begins to usurp the function of the spoken word, and the days of the religious teachers are over. Literature, however, comes first into the field as an adjunct of religion, and as such is largely concerned to carry on their work. The plays of the great Greek dramatists, for example, are inspired by a profoundly religious intention; they emphasize the helplessness of the individual man, discourage pride and overweening self-confidence, and urge moderation especially in success; they convey a sense of the imperious power of the gods and unfold the Nemesis that waits on those who thwart it. Even Euripides, who is, comparatively speaking, a free-thinker, lays great stress on conduct, and advocates an all-round humanitarianism to mitigate the moral severities which the Greeks had inherited from a cruder if more heroic age. The Morality Plays of the Middle Ages carry on the same tradition; the drama is used as the vehicle for conveying moral precepts, which are, generally speaking, considerably in advance of the level of the contemporary code of belief and conduct. We cannot here fill in the details of the tendency which we have briefly indicated, but the general development of at least one branch of literature, from its origins in prophecy, precept, and preaching, until we reach the ethical comedies of Molière and Shaw, is, I think, sufficiently clear.

Parallel with this development is the growth of poetry, from the songs of the bards commemorating the deeds of great warriors into the fully developed epic of Dante or Milton. Of the didactic function of poetry I shall treat in detail in Section II. For the present it is sufficient to point out that the ethical, religious, and metaphysical strain in poetry has always been prominent, sufficiently so indeed to warrant the assertion that the showing forth of the ways of God to man, the establishment of canons of right conduct, and the nature of human destiny are its main preoccupations. Even when the poet is frankly hedonist like Horace, the chief object of his art seems to be to preach and to justify his Epicureanism.

The seventeenth century, which may justly be called the great age of poetry, is aflame with moral fervour and tormented with metaphysical bewilderment. Donne and Vaughan, the most typical expressions of its mood, are primarily interpreters of the life of the spirit in its ardent search after God, seeking to make plain to others the way of the devout life which involves the abnegation of self as a pre-requisite of communion with God. The movement culminates in Milton, who ends his introduction

to *Paradise Lost*, a poem instinct with religious purpose, with the prayer:

> That to the height of this great argument
> I may assert Eternal Providence
> And justifie the wayes of God to men.[1]

So far as the great mass of love-poetry is concerned it would be difficult to overestimate the effect of the lyric, the ballad, and the sonnet upon the mind of the race; indeed it is scarcely too much to say that it is to the poets that we owe the purification and refinement of the whole sex relationship. From a physical relationship designed to satisfy a physical need, it is elevated to a plane on which it becomes capable of embracing and harmonizing every side of our natures. The notion that love may refine and ennoble, that it may call forth the highest that is in us, constraining us to acts of sacrifice and devotion of which in any other relationship we are incapable, is one for which we have largely to thank the writers of romantic poetry. In nothing is the degree of human advancement above the level of animal life more plainly manifest than it is in the relationship between the sexes, or perhaps I should say in its ideal conception, and there is no more obvious example of the social influence exerted by great writers than in the part they have played in this advance by the refining and softening influence of poetic literature.

The influence of poetry in sharpening and broadening our appreciation of nature and natural beauty is no less clear. That the nineteenth century inaugurated a new 'return to nature' is a commonplace. In the vivification of man's feeling for nature, surely one of the most notable advances of the human spirit, an unmistakable instance of an increase in the scope and subtlety of awareness, the nature poetry of Shelley, Keats, and Wordsworth played an essential part. The romantic poets of the nineteenth century literally opened our eyes to nature. The conception of nature as an expression of the spirit, as an embodiment or showing forth of what is permanent and perfect in the universe, of the reality which underlies the world of fleeting appearances, is one which we owe above all to Wordsworth and to Shelley. That there is another world behind and beyond that of everyday life, a world that is in some sense the goal and final resting-place of the spirit, and that this world is chiefly intimated to us in the beauty of nature, is the conception which underlies the utterances of both poets, and although, as I shall try to show, the questions raised by the significance of aesthetic appreciation and of natural

[1] Milton, *Paradise Lost*, Book I, lines 24–6.

beauty as one of the objects of aesthetic appreciation, belong to a different line of inquiry from that which we are pursuing at the moment, we cannot in passing too strongly stress the contributions of the nature-poets to the advance of the human spirit.

A word may be added on the general characteristics of the literature which is used as an instrument of the evolutionary purpose. Of these the chief is a persistent and unflinching realism. It is not difficult to see why literature which aims both at disturbing and at instructing should be fundamentally of a realistic character. The ordinary man obtains his code of morality ready made from his social environment. He believes certain things to be right, just as he believes certain things to be true, not because he has considered them on their merits, tested them by experience, and conscientiously and deliberately rejected the contrary beliefs, but because they are the current beliefs of his country and his age. The originator of new ideals in conduct, or of new ideas in thought, differs from the ordinary man chiefly in his ability to see things for himself. Instead of taking them on trust he takes them on their merits, which nine times out of ten he pronounces to be no merits at all but demerits. The ability of the genius to see things for himself is fundamentally the same as that of the artist, who differs from other men in being aware of exactly what it is that he is seeing in the objects around him; it means in effect seeing them stripped of the conventional accretions with which common practice and common thought have surrounded them. He is aware, in other words, of elements in common situations which the ordinary man misses, and it is in this awareness that his originality lies. The elements in question are mainly of the kind that we call connexions or implications. The average man fails very notably to connect; he keeps his ideas in separate compartments, as, for example, the idea that fighting is right and the idea that killing is wrong, and does not associate the contents of the compartments. The typical activities of the genius consist in pointing out the connexion that everybody else has missed. This faculty of seeing connexions, although it is in some form present in all geniuses, is peculiarly prominent in the man of science. It is common knowledge that the greatest advances of science have been due to the perception of a common fact which everybody has observed, but whose significance everybody has overlooked. Newton observing the falling apple, or James Watt watching the steam lifting the lid of the kettle, are simply late descendants of that large family of perceptive geniuses whose ancestor was the ape who first abandoned the trees, forwent the use of his tail, gave up his crouching

position, and elevated himself from all fours into a precarious eminence on two legs. The characteristic of all the members of the family has been their ability to realize unexpected possibilities in familiar situations, to see in those situations implications that have escaped their fellows, and to see them in such a way as to open up new possibilities of development for the race as a whole.

Those geniuses who have contributed to the advancement of thought rather than to the development of practical life, the preachers, teachers, and poets of whom we have hitherto chiefly spoken and with whom we are chiefly concerned, exhibit the same quality. Their most characteristic activity consists in revealing the implications of current morality; their penetrating insight pierces through shams and hypocrisies to the reality they disguise, and exposes its unworthiness. Christ, Socrates, Buddha, Swift, Marx, Ibsen, Bunyan, Shaw, to take a few names at random, are no dreamers of dreams, but men very wide awake concentrating on the everyday world. Starting with a clear view of things as they are, a view revealed to an insight denied to their contemporaries, they have proceeded to indict those things; this indictment becomes in turn a starting-point for a description of the remedies which the deficiencies in the real as it is demand, and the description is in its turn elaborated into a sketch of the real as it might be. Thus the essential element is literary work of the highest order seems to be the ability which all geniuses appear to possess to direct attention to aspects of reality which have hitherto escaped notice.

As for style, for diction, for beauty of presentation, and the other graces and adornments of literature, the genius has usually been content with as much or as little of these as was necessary for his purpose. Certainly his message must command attention, and, all the more because it is distasteful and disturbing, must he clothe it with a form that will please and attract. But just because the message is addressed to all men, the form must be a simple one. First-rate literature is never esoteric; it enshrines simple truths in words that are as simple as the truths that they convey. The parables of Christ, or the short stories of Tolstoy, are from the purely literary point of view perfect works of art; yet they are very simple. By a homely simile, a striking image, or a simple analogy, they strip away the husk of convention and bring their hearers face to face not with new truth, since the truth has been there all the time, but with an aspect of truth which they had hitherto failed to perceive. For the genius seeking to perform, or chosen unconsciously to perform, the function I have tried to describe, a simple clarity of style is the fundamental requisite.

His message is the essential thing, and about his meaning there must be no mistake. Hence the chief object of his style is to convey meaning in the most forcible way, and it must stand or fall by its success in this respect. A truly original style is never achieved for its own sake, but for the sake of the meaning which the author wishes to convey. Effectiveness in the assertion of the meaning is, therefore, the Alpha and Omega of style. He who has nothing to assert has no style, and can have none; he who has something to assert will go as far in point of style as its momentousness and his conviction will carry him. Thus critics are accustomed to find the perfection of literary excellence in the absolute simplicity of the prose style of Swift.

To the question of the significance which, on the assumption of the didactic function of literature, we must attribute to force of expression, beauty of style, and poetic fancy I shall return in Section II.

3. Reception of the genius.

That the message of the genius will be resented is, on the view I have been advocating, inevitable. The ordinary man, as I have pointed out, takes his beliefs ready made from his social environment. This he does because, possessing neither the energy nor the wit to evolve a code of beliefs for himself, he has nevertheless a deep-seated need to believe. Freedom of belief is as intolerable to him as absence of belief. His whole being revolts against that suspension of judgement, that impartial attitude to contending claims which is the mark of the scientific mind; he must at all costs have certitude. Hence, though destitute alike of the capacity and of the desire to inquire into the evidence on which they are founded, he gladly embraces whatever beliefs may be available, on condition that they fulfil the all-important requisite of telling him what to think and what to do. Since the basis of belief is the desire not for truth but for certitude, it is essential that the belief should not be questioned. History shows only too plainly that men cannot endure to have their thought disturbed or their conduct challenged. And so it follows inevitably that the genius, who on our view must from his very nature disturb and destroy a prevailing level of thought, in order that he may prepare the way for a new one, is abused as an outrageous and often as a blasphemous impostor. Heterodoxy in art is at worst rated as eccentricity or folly, but heterodoxy in morals is denounced as propagandist wickedness, which if tolerantly received will undermine the very foundations of society, while the advance on current morality, in which the hetero-

doxy normally consists, is only achieved in the teeth of vested interests in the thought and the morals it seeks to displace. Thus, while the genius in the sphere of art is usually permitted to starve in a garret, the genius in the sphere of conduct is usually persecuted and killed with the sanction of the law. An examination of the great legal trials of history from this point of view would make interesting reading. Socrates, Giordano Bruno, and Servetus were all tried and condemned for holding opinions distasteful to persons in their own day, but for which the world now honours them. Perhaps the method most frequently adopted by society for dealing with subversive ideas has been to assert that their author is mad. This charge of madness, especially if it can be substantiated, goes far to discredit unpleasant ideas and to minimize the shock which their author administers to our self-respect. It also justifies us in refusing to take them seriously, enabling us, for example, to relegate *Gulliver's Travels* to the use and enjoyment of children.

The connexion between madness and genius has, indeed, always been recognized, a fact which should not occasion surprise, since the behaviour of the genius has, it must be confessed, only too often lent countenance to the charge. It may well be that in those whom the Life Force has chosen to be the vehicles of its message there is some taint of abnormality. A biological 'sport' cannot always expect to achieve complete normality even in respect of the characteristics other than those in respect of which it is called a 'sport'. As Nietzsche himself points out, it is a mistake to suppose that insanity is always a symptom of degeneracy; it may frequently be evidence of a higher level of culture than that which is regarded as sane. In primitive and developing stages of society insanity has played a most important part, not only by bringing what is new into the thought of the race, but by commanding attention for the novelty introduced. It is only, on Nietzsche's view, by means of what he calls the 'Divine' turbulence of insanity that any new moral law could make progress among primitive peoples. 'Just as for us there seems a little madness in all genius', comments Mr. Havelock Ellis, 'so for them there seemed a little genius in all madness; sorcerers and saints agonized in solitude and abstinence for some gleam of madness which would bring them faith in themselves and openly justify their mission.' [1]

Even if the genius is not born mad, he may frequently become so. The man who is at perpetual variance with his age is subjected to a strain which few can endure, at any rate for a lifetime, and preserve their sanity unimpaired. The contemporaries of the

[1] Havelock Ellis, *Affirmations* (1926), p. 36.

genius have never ceased to urge upon him the wickedness and the abnormality of his views; he knows that he is unpopular and suffers from a loneliness of spirit which intensifies the abnormality from which it springs. It is not to be wondered at that his heart should sometimes fail him, and that, like Christ on the Cross, he should cry out, 'My God, my God, why hast thou forsaken me?' Absolute conviction is, it is true, one of the hall-marks of genius, but it has never been unwaveringly maintained.

There is the further complication that the man who, in respect of his own particular inheritance from and inspiration by the Life Force, is the forerunner of the thought and morals of the future may, so far as his general outlook on life is concerned, faithfully reflect the level of the present. This is of course more particularly the case with the artist, the vigour and originality of whose conceptions in his own particular sphere are only matched by the slavish conventionality of his attitude in matters of conduct and belief. Nietzsche himself brings out very vividly the consequences to the individual of the possession of a mind at two levels, which insists on flouting the age in one department while respectfully following it in all the rest. Broadly speaking the effect is one that may be described as that of bad conscience. To be customary, as Nietzsche points out, is to be moral; to be individual is to be wicked. Thus originality of any kind involves a bad conscience on the part of the man who is shocked at his own temerity in departing from the ways of his neighbours. Thus every good gift that has been given to man puts a bad conscience into the heart of the giver. 'Every good thing', to quote Mr. Havelock Ellis again, 'was once new, unaccustomed, *immoral*, and gnawed at the vitals of the finder like a worm. Primitive men lived in hordes, and must obey the horde-voice within them.' [1]

It is this conflict within the heart of the genius himself, a conflict which expresses itself in the compulsion to originate and by so doing to antagonize on the one hand, and in a profound loneliness and regret at the resultant outlawry from the herd on the other, that goes far to account for the abnormality and despondency which observers have so often accounted as madness. At the same time it would be difficult to find a better illustration of the genius as a man possessed, of his being constrained and used by a Force outside himself, than in this conflict which is waged within him between the ordinary man who craves for the ordinary joys of human fellowship and the inspiration which forces him to alienate the very sympathy he craves.

[1] Havelock Ellis, *Affirmations* (1926), p. 60.

It is not, however, by the personal abnormality of the genius so much as by the antagonism he provokes that the authenticity of his credentials is to be tested. I have tried to explain the causes of this antagonism and to show why it is inevitable. There is, indeed, little reason to suppose that the opposition to what is new grows less as evolution proceeds, because it expresses itself in milder or at least in more subtle forms. The earlier method was to kill our great men as soon as the force of their doctrines made itself felt: Socrates was poisoned, Jesus was crucified, Bruno was burnt. Of later years we have been more inclined to discredit their minds with the charge of madness than to destroy their bodies with violence, leaving the tragedy of genius to unroll itself to its bitter close. Nietzsche and Pascal, Swift and Rousseau, have all paid in varying degrees this same penalty for flouting the prepossessions of the many.

More recently still we have employed the weapon of economic blockade, requiring of the man who insists on doing his own work instead of consenting to say and to do what the world asks of him, that he shall starve for his obstinacy. The economic embargo is employed indiscriminately against the original artist and the original thinker. Nor can we expect that it should be otherwise, seeing that the thought of the genius and the work in which it is embodied are not only unflattering to his contemporaries, but find the world as yet unready for their reception. Thus, every genius is under the necessity of first creating the taste for which he caters. The early struggles of men like Ibsen and Shaw illustrate the difficulty which the genius experiences in obtaining recognition for his work, just as their subsequent success shows with what increasing rapidity the mind of the race moves up to a level of thought which seemed on its first appearance so shockingly in advance of contemporary ideas as to savour of absurdity.

If I may take an instance from contemporary thought, the reception of Shaw's play *Man and Superman*, when it was first produced in 1906 and again when it was revived in 1922, will serve admirably to illustrate the point. On its first appearance *Man and Superman* was denounced (I have the criticisms before me as I write) not only for the countenance it gave to immorality in general, but for its inversion of what was taken to be the normal sex relationship between men and women. The play represents woman as in active pursuit of man, who after ineffectual struggles succumbs in the end to her superior sex strategy, much as the fly is entrapped in the web of the spider. This conception was regarded as a flagrant

contradiction of the facts and an insult to the modesty of women, and the author was criticized accordingly. When the play was revived it was judged merely as a comedy; its ideas excited little comment, the main thesis being accepted as a commonplace with which the audience was perfectly familiar. Young people were indeed heard to remark on the dullness of Shaw. Looking at the world through intellectual spectacles which he had tinted for them, they saw things naturally in his colours. This indeed is the Nemesis that waits on those who tell the truth for the first time, that sooner or later we think we always knew what they have told us.

The present position and reputation of Shaw afford a good illustration of what we may regard as a speeding-up of the movement of evolution. Two thousand, or even six hundred, years ago, our great men had to wait until they were dead before they received popular recognition; to-day they are honoured in their lifetime. Six hundred years ago it was the children who treated as common sense the doctrines which their parents had stigmatized as outrageous; to-day the great man does not have to wait for the plaudits of our children; it is we ourselves who vie with one another in honouring the man whom we once denounced as a scatter-brained fool or an immoral rogue.

4. *Illustrations.*

To illustrate the opposition which genius on its first appearance arouses in the contemporary mind is beyond the scope of this book; nor indeed is the thesis maintained one which would, I think, be generally questioned. It is difficult, however, to refrain from giving one or two examples of the process I have described, and in order not to soil my philosophic pages with the savage ferocity and brutal abuse with which the originators of new thought have been received, I will choose examples from the gentler sphere of art-criticism. I will take as instances works of art which, now accepted as embodiments of orthodoxy, were denounced when they first appeared as outrages upon public decency and flagrant violations of the canons of good taste.

One of the earlier pre-Raphaelite pictures was the well-known 'Christ in the House of His Parents' by Millais. Of this a leading art critic of the period wrote:

> Mr. Millais has been successful in giving to the higher forms, characters and meanings a circumstantial art-language, from which we recoil with loathing and disgust. There are many to whom his work will seem a pictorial blasphemy.

Dickens, always a spokesman for the contemporary Plain Man, thus described the same picture in a *Household Words* article:

In the foreground is a hideous, wry-necked, blubbering red-haired boy in a nightgown, who appears to have received a poke in the hand from the stick of another boy with whom he had been playing in an adjacent gutter, and to be holding it up for the contemplation of the kneeling woman, so horrible in her ugliness that (supposing it were possible for a human creature to exist for a moment with that dislocated throat) she would stand out from the rest of the company as a monster in the lowest gin-shop in England.

Thirty years later, one of the world's most popular pictures, Whistler's 'Portrait of his Mother', was similarly received.

Before such pictures [wrote the critic of *The Times*] the mind vacillates between the feeling that the artist is playing a practical joke and that he is suffering from some peculiar form of optical delusion. After all, there are certain accepted canons about what constitutes good drawing, good colour, and good painting, and when an artist deliberately sets himself to ignore or violate all these, it is desirable that his work should not be classed with that of ordinary artists.

Millais in due course became President of the Royal Academy. His picture belongs to the nation and hangs in the Tate Gallery. It is difficult to understand to-day how anything so charming could ever have caused offence. The Whistler portrait hangs in the Louvre, and so universal is its appeal that during the war it was turned, with doubtful taste but undoubted success, into a poster advertising War Bonds. Of one of Cézanne's pictures Whistler himself remarked, 'If a child of ten had drawn that on her slate, her mother, if she had been a good mother, ought to have slapped her'.

The following are quotations from contemporary criticisms of Beethoven's work, published on the occasion of his death.

Enumerating its general characteristics, a critic described it as 'obscure, eccentric, and unmelodious'. 'Few marks of study are to be found in his works, and not an example of a fugue regularly conducted.' His Symphonies are stigmatized as 'prolix and wearisome'; he perpetually mistook 'noise for grandeur, and extravagance for originality', spoiling his effects 'by much that was turgid and not a little that bordered on the ridiculous'. In this connexion the comments and criticisms passed on Beethoven's Second Symphony, now regarded as in the main an imitative work, displaying few of the individual characteristics which we are accustomed to associate with its author, are particularly instructive.

Mozart himself, who to-day is regarded as the perfect embodiment of classical good form in music, and who possessed such an extraordinary command of the technique of his art that his operas

and symphonies, while contriving to express every phase of passional emotion, are nevertheless found on examination to be at the same time perfectly symmetrical sound patterns, was violently attacked by his contemporaries for employing music to achieve effects that it was never designed to produce. Absence of melody, illegitimate and discordant harmonic progressions, monstrous abuse of the orchestra, in short, all the stock criticisms which are levelled at most modern music to-day, and were levelled fifty years ago against Wagner, were brought one hundred and fifty years ago against Mozart himself.

Instances could be multiplied indefinitely. I have quoted one or two, simply to illustrate my general thesis of the antagonism which is inevitably aroused on the first appearance of the work of a genius. This antagonism is due to the fact that the genius is the vehicle of a fresh inspiration from the Life Force; this inspiration expresses itself in a conception of right and wrong in morals, of truth in thought, and of beauty in art, which is at a different and higher level of development from that which has been hitherto achieved. This conception must from its very nature challenge and question existing notions of what is good, what is true, and what is beautiful, and must appear, therefore, to those dominated by existing ideas, that is to say, to everybody but a few perceptive critics themselves touched with the quality of genius, as wicked, false, and ugly. The genius, however, is an evolutionary 'sport' at the mental level, a variation designed to inaugurate a fresh development in the thought of the race. In due course, therefore, if the experiment which the genius represents is a success,[1] the thought of the race as a whole begins to reproduce the variation which first appeared in the genius. The race, in other words, moves up to the level first reached by the genius alone.

When this happens the heresies of the genius pass into the orthodoxy of the race; but as they become accepted their virtue goes out of them. As the living spirit of inspiration dries up they petrify into a hard, unyielding crust of good taste, good form, and correct thinking, in which the inertia of the race can again come to rest. Thought which has been hallowed by tradition, literary works whose greatness is a dogma, beliefs which it is impious to question, are the inspirations of the past which have lost in effectiveness what they have won in acceptance, while yet they remain and will always remain for the few what they were for the few at first. All that is inert and lazy in man combines to cherish

[1] Some 'sports' in the history of biology simply disappear: equally some geniuses fail to make good.

and foster the traditional crust of thought, and to resist any attempt to destroy it afresh. It is only when a new genius comes forward to embody the inspiration of a fresh pulse of life that the crust is broken through.

Thus the evolution of thought proceeds by jolts, because it is only by a violent and sudden thrust that the dead and static orthodoxy into which the living flow of previous inspiration has become fixed can be pierced. Each genius is, in this view, directed to the performance of a particular purpose; when that purpose is fulfilled, the work through which it was fulfilled becomes in its turn an obstruction in the way of further advance, until a fresh genius appears to break through and thrust it aside.

It is only thought which is living that can serve the purpose of evolution; but thought lives only for a time. When it has served its turn it is as good as dead, and like a lifeless trunk from which the sap has departed, lies athwart the future progress of the race. Just as the record of the rocks bears witness to the existence of countless species which, having played their part in the evolution of life, were superseded, so is the world of thought strewn with the debris of extinct systems which once embodied the inspiration of Life. But while superseded creatures passed from the evolutionary stage when their purpose was fulfilled, the thought of the past can still act as an obstructive crust to the thought of the future. It is through this crust that the genius who is pregnant with the thought of the future must force his way.

II. THE FUNCTION OF POETRY.

The view of great writers as evolutionary 'sports' at the mental level, or as vessels specially chosen by the Life Force to give conscious expression to its instinctive purpose, involving as it does a conception of literature as essentially propagandist in character, demands special treatment in its bearing upon poetry. When it is said that great writers and thinkers are actually great preachers and teachers, and are to this extent propagandists, the word is used not in the narrow sense to imply advocacy of a particular cause, but to denote the special vocation of the great writer as a missionary of life itself. In following this vocation, he gives expression to a new conception of the purpose and character of life, and of the status and duties of human beings in relation to that purpose, his effect upon his fellows, to put the case in its most general aspect, being to render them conscious of more beauty, more passion, more scope for their sympathy and understanding in the world than they saw before, to enable them, in a word, by one

method or another, by contrast or by sympathy, to discover themselves. Interpreted in these general terms the word propagandist loses something of the peculiar flavour, a flavour derived from its moral and political associations, which renders it obnoxious to those who care for the disinterested verities of art.

Of these verities I shall have more to say in the succeeding chapter, where I hope to make ample provision for the view that the artist is one who communes with immutable entities not translatable into the terms and values of everyday existence; but, as that chapter is approached, it will be found—and I make frank admission of the fact at the outset—that from this conception of the artist's function I specifically exclude the poet.

In view of this admission it may well be asked, whether there is not something paradoxical in ranking the poet, not with the artist as the creator or contemplator of a nobler and in some sense perfect world, but with the preacher and the propagandist as a grinder of axes in this one, a paradox not entirely removed by my extended interpretation of the word ' propagandist ', especially when it is realized that, in conceding this interpretation, I am deliberately placing upon the function of the genius, whom I have hitherto treated in a sense more specific as a militant and original moralist, the widest possible construction that my theory will allow. The poet, it may be said, is a weaver of beautiful patterns, a creator of exquisite fancies, whose imagination plays in a brightly-lit world of beauty and romance, whence he returns laden with the trophies of his genius, and embodies them for our delight in settings of unforgettable loveliness. His function is the creation of beauty, not the pursuit of a thesis. With what right, then, can he be classed with the teachers and moralists among those advance riders of the march of evolution for whom I have appropriated the word 'genius'? The reflection that I have the backing of good authority, though comforting, is not conclusive. 'All great art is praise,' said Ruskin; but ' Poetry ', said Matthew Arnold, ' is a criticism of life '. But it may be doubted whether either critic would have wished a casual remark to be taken too literally, or would have been happy in subscribing to the sharp distinction I have made. To answer my question, therefore, it is necessary to examine in some little detail what it is that the poet does, and the nature of the effect that he produces.

A famous definition of poetry describes it as the mating of sound and sense. Provisionally accepting this definition I note that poetry performs two functions. It expresses meaning, and it expresses meaning in words that have a beautiful sound. The fact that it

expresses meaning distinguishes it from music which is in the strict sense meaningless; the fact that it expresses meaning in a beautiful way distinguishes it on the whole from prose, which is in the main concerned to express meaning clearly rather than beautifully.

Now if we consider separately the performance by poetry of each of these functions in relationship to other forms of expression which discharge the same function, it appears to be difficult to account for the value which is attached to poetry by the human mind, and the magnitude of its effect upon our lives. Taking first the function performed by poetry in expressing meaning, we must, I think, admit that its capacity in this respect is not greater but, if anything, less than that of prose. From the formal point of view poetry is merely prose cut up into lengths. Now so far as meaning alone is concerned, it seems fantastic to suggest that the mere process of placing words in lines of a certain length, disposing them in certain order, and arranging them in such a way that they convey an effect of rhythm, invests the words with a new meaning or adds to their capacity for conveying meaning. Whatever it may be that metre, rhythm, and poetical forms of expression do for us, they do not enable us to say something different from what can be and is said in formal prose or in informal speech. No meaning is conveyed by the device of arranging words according to certain laws of metre and rhythm which could not have been conveyed without that device. Suppose we take a lyric of Shelley's, and paraphrase it in prose. It is difficult to maintain that the paraphrase, if accurate, does not say exactly what the original poem said. It may say it less beautifully, it may say it in such a way that it produces no effect save one of weariness and disgust, but nevertheless it says the same thing; whatever has been lost—and admittedly everything of value has been lost—it is not the meaning.

This reflection seems to lend countenance to the view that the meaning is not of the essence of poetry. That which poetry says, what it is about, is, it may be urged, unimportant; what matters is the form in which the meaning is conveyed. The peculiar effect produced by poetry does not therefore depend upon the meaning; it does depend upon the choice of words, upon the arrangement of the words chosen, upon the sound of the words when read ideally, upon the memorableness of the phrases, and upon the beauty of the images and metaphors with which the poet has invested his thought. A moment's reflection, however, shows that this suggestion cannot be entertained. If we hold that the *raison d'être* of poetry lies in an arrangement of word-patterns in such a way that

the metre and rhythm will excite or lull the spirit and the harmonious consonance of sounds enchant the ear, if, in a word, we think that the business of poetry is to make beautiful sounds, then we reduce poetry to the position of a mere makeshift for music. The most sonorous poetry in the world, in so far as sound and sound alone is concerned, is a wretched substitute for music; even the most resounding lines of Milton or Homer are from the musical point of view negligible. Compared with the wealth of musical harmony, the range and variety of sound upon which poetry can draw is exceedingly restricted, nor would anybody contend that the potentialities of words for producing variety and beauty in sound can be compared with those of a piano or an orchestra. What is true of harmony is true also of rhythm; there is such a thing as lilting verse, but the lilt of words cannot be compared in effectiveness with the rhythmic beat of, say, the opening bars of Beethoven's Fifth Symphony. Music is the natural medium for the creation of beauty in sound, and poetry can do but poorly and within narrow limits what music does with extravagant ease by merely obeying the laws of its own nature. If it be the function of poetry to create beautiful sounds, it is merely usurping the province of music. Thus, on the one hand, considered as a medium for the communication of meaning, poetry seems an artificial and unnecessary substitute for prose; considered, on the other, as a method of creating lovely sound-patterns in words, it is a poor and unsatisfying substitute for music.

Since, then, it would seem that the value of poetry cannot depend upon its capacity either for conveying meaning or for creating beauty of sound, the question arises, what is its special function in the right performance of which its value consists? I return to the example of the Shelleyan lyric. Where are we to look for the elusive essence that constituted the value of the lyric and was lost in the paraphrase? It cannot be located in the meaning, since the same meaning, we found, was conveyed by the paraphrase as by the lyric. Some beauty of sound has certainly disappeared, but the sound, we have agreed, is not of the essence of the matter, and the difference in the effects produced by the lyric and the paraphrase cannot, therefore, be accounted for solely in terms of sound. The answer to our question is, I think, to be found in the emotional content conveyed by the meaning, when the meaning is beautifully expressed. The lyric moves us; the paraphrase does not. In a colloquial sense the lyric 'means more'. In a strict sense it 'means' no more. This is the brute fact which must form the starting-point for any explanation of the peculiar

effect of poetry, a fact which we may express by saying that, while the meaning conveyed in each case is the same, the amount of emotional disturbance that it causes is totally different.

The point, though a simple one, is worth illustrating because often overlooked. If a friend enters my room and tells me that Jones is dead, Jones being a person whom I do not know or for whom, at any rate, I have no strong feeling, the emotional effect produced by his words will in any event be small and may be non-existent. If the same friend bursts into the room in disordered attire without knocking and, with distorted features, starting eyes, and every appearance of real or simulated excitement, announces the death of Jones at the top of his voice, in a melodramatic whisper, or in whatever way his histrionic sense may suggest to him as the most effective, I shall experience strong emotion. Yet the meaning conveyed by his words is precisely what it was in the first instance.

Similarly where the emotional effect is produced not by melodrama but by poetry. If I read in a book a statement by a young man to the effect that a girl has jilted him and that he wishes to commit suicide, I remain comparatively unmoved. But the same fact when conveyed to me in the words,

> Come away, come away, death,
> And in sad cypress let me be laid;
> Fly away, fly away, breath;
> I am slain by a fair cruel maid,[1]

affects me with a feeling of delicious and wistful melancholy.

From the fact that the lyric moves the reader while the paraphrase does not, we may presume that the lyric secures a degree of attention for itself which the paraphrase does not. The lyric is read and re-read; it is remembered and recited; it affects the emotions and through the emotions the thought of the reader, and, as he experiences in it an ever-growing delight, it may gradually come to exert an influence over his whole life, modifying his actions and reflecting itself in his thoughts.

One further point must be mentioned, and I shall be in a position to link up my theory of poetry with what has been said with regard to the general character of genius earlier in the chapter. The significance of poetry, as I have said, consists in its ability to convey meaning with an emotional content. Yet it may well be asked why I have omitted any mention of the fact that poetry is beautiful and appeals to the aesthetic sense, and it may be objected that it is to this simple fact, and to this fact alone, that the peculiar effect

[1] Shakespeare, *Twelfth Night*, Act II, Sc. iv.

produced by poetry may be ascribed. The answer to this objection will partly appear in the next chapter, where I shall discuss the general character of beauty and the nature of the sense to which it appeals. The position which I there hope to establish is that beauty is a Form, in Plato's sense of the word, belonging to a supra-sensible world, and that it is the function of beautiful objects, especially of music and of pictures, to elevate the mind to a contemplation of this world. It follows that beauty is unique in the sense that it cannot be expressed or described in terms of this world; that it is, therefore, meaningless in the sense that it has no meaning which can be related to or translated into any of the meanings appropriate to this world; that it arouses a specific emotion which is distinct from the emotions of ordinary life, and that, as a consequence, whatever deals with the affairs of ordinary life, and devoting itself to the representation of human interests, passions, and sufferings, arouses emotions of the same kind as those aroused by life, though it may be in part aesthetic and derive something of its appeal by borrowing, as it were, from the world of beauty, can never appeal purely and primarily to the sense to which beauty appeals, just because it is not purely and primarily beautiful.

That poetry always expresses meaning, and that it cannot be judged purely as a beautiful pattern of words, I have already tried to show. But I now wish to advance a further proposition. The meaning which poetry expresses is always of necessity one which belongs to the sensible world and is dependent for its effect upon the emotions appropriate to that world. The effect of poetry is, in other words, relative, that to which it is related being the emotional experiences of its readers. Just as a picture would be valueless to a man who could not see,[1] so poetry would be valueless to those who had neither suffered nor felt. To a reader devoid of emotional experience the meaning conveyed by poetry would remain, but the emotional content, which we have seen to be of the essence of poetry, would be lacking. It is a commonplace that no man can appreciate to the full the poetry of love unless he has been in love; it is equally true that no man can be thrilled and elevated by great tragic poetry if he has never suffered. To get all that there is in poetry out of it, to realize to the full the poet's

[1] I would add 'and music to a man who could not hear', were it not for the deaf Beethoven and one or two similar cases. To appreciate music it seems to be necessary to have heard once, though not always to hear now. The important point is, however, that, whereas experience of the *emotions* of this world is not necessary for the exercise of our faculties of seeing and hearing, it is necessary for the appreciation of poetry.

meaning and respond to his appeal, we must ourselves have experienced something of that of which he tells, and the deeper and more varied our experience the greater will be the effect of poetry upon us and the greater the love we have for it.

It is in this sense, then, that the value of poetry is relative; it is not something fixed and immutable, there for all readers for all time, but it comes into existence only in so far as there exists some chord in the reader's soul tuned by experience to the note the poet strikes. To speak for a moment in the language of theory of knowledge, the value of poetry is in part subjective; it is not, that is to say, a fixed and changeless attribute of poems, but conditioned in part by the receptivity of the subject. With the element of objective value in poetry I shall deal in the last chapter.

What is true of the readers is true also of the writers of poetry. The poet is essentially a man who has loved and suffered. In this respect he is to be distinguished from the musician and the artist. The musician and the artist may have loved and suffered too, but the fact is irrelevant to their music and their pictures; it is not for them as it is for the poet, a vital factor in the content and quality of his work. The great tragic poet is like the prophet or seer in the variety and intensity of his emotional life and the richness of his experience, and it is this variety which gives to his writing its philosophic scope and depth. This is true to some extent even of the lyric poet who never sings so sweetly as when his mistress is unkind; but in the case of the epic or tragic poet this element of personal experience and suffering constitutes one of the main sources of his power. It is for this reason that children who can both compose and love music are on the whole insensible to great poetry. There are no child prodigies in poetry just as there are no child lovers of great poetry, because children have still to undergo that experience of life from which the feeling that expresses itself in the creation and appreciation of great poetry takes its rise.

Now all these considerations spring directly from the fact that it is of the essence of poetry to deal with the life of every day, the life that is lived in the sensible world. Poetry, just because it is expressed in words, must of necessity be about something, and this characteristic of being about something relates it necessarily to the sensible world and to the experience which we have of the sensible world. It is concerned not with some perfect world of unattainable reality, but with human ideas and human emotions; not with absolutes true for all time, but with emotions that are felt here and now; and it is because poetry can never win free from

its origin in the writer's experience, or divest itself of its relationship and appeal to that of the reader, that it can never lose its element of meaning. However formal it may be in manner, however apparently remote or trifling in content, it is never devoid of meaning, which forms, as it were, an intellectual core, present even in the most purely lyrical poetry. That this is so may be seen by taking at random a few lines of poetry and examining their content. There are many competitors for the honour of being the most poetical line in the English language. I myself should give the palm to 'Over the hills and far away', although, if we are permitted to extend the scope of the competition to other languages, the line 'Sunt lacrimae rerum et mentem mortalia tangunt' seems to me superior. In both these cases, but especially in the second, the element of meaning is too clear to need emphasis. It is present though perhaps less pronounced in a purely lyrical utterance such as the anonymous poem,

> Oh western wind, when wilt thou blow
> That the small rain down can rain ?
> Christ, that my love were in my arms,
> And I in my bed again! [1]

and it is still present, though with decreasing prominence in the sense that it is becoming more difficult to say what the poetry is about, in songs of the 'In the spring time, the only pretty ring time' [2] type, and even in such doggerel lines such as

> Hark, hark!
> Bow, wow,
> The watch-dogs bark:
> Bow, wow.
> Hark, hark! I hear
> The strain of strutting chanticleer,
> Cry, Cock-a-diddle-dow.[3]

It is only when we come to poetry that contents itself with simply making noises, generally in imitation of sounds in nature, as, for example, the famous line,

> Cuckoo, jug jug, pu whe, to-witta-woo,[4]

that we reach a limiting case in which the element of meaning reduces practically to zero, although even here we may say that the poet is trying to convey to the mind of the reader a general impression of the variety and multitudinousness of birds' voices sounding together in the early spring.

[1] Anon., *Oxford Book of English Verse*, No. 27.
[2] Shakespeare, *As You Like It*, Act v, Sc. iii.
[3] Shakespeare, *The Tempest*, Act i, Sc. ii.
[4] T. Nash, *Spring*, Golden Treasury, No. 1.

From the above considerations I conclude first, that poetry can never dispense with the element of meaning; secondly, that this element is conveyed with an emotional content; thirdly, that the meaning necessarily consists of the statement of facts, the expression of thoughts, and the communication of emotions belonging to the sensible world; and fourthly, that if, as I shall try to show, beauty exists apart from the sensible world, poetry can never be purely beautiful. Beautiful it may be, but its beauty is incidental to the performance of a function which is itself other than the manifestation or creation of beauty. In all these respects, poetry, as I shall try to show, differs from music and painting. Poetry, in a word, fixes our thoughts upon the sensible world, and heightens and enriches our perception of it; to elevate the mind to a contemplation of what lies beyond the sensible world is not its function or its purpose.

I am now in a position to relate what has been said about poetry to the general theory of genius with which I began this chapter. The poet is a special case of the genius. He is the vehicle chosen for the purpose of conveying a feeling for and an understanding of life, its nature, its meaning, and even, on occasion, its purpose; and since he is in advance of the evolutionary level achieved by the general average of his contemporaries, the communication of this feeling and understanding, the adoption, in a word, of the poet's *attitude* has an evolutionary significance for his age, modifying the general mind both in regard to its scale of moral and aesthetic values and to the content of its thought. But though the outlook of the poet is in advance of the general mind of his age, it is behind that of its greatest thinkers. The poet rarely says what is new; what he does is to say what others have said before him, but, unlike those others, he says it in such a way that mankind must attend.

A quotation from Shelley will help me here, both as determining the part which the poet may be said ideally to play, and has on occasion actually played, and as serving to indicate the failure of most poets to perform directly the function which Shelley assigns to them.

> Poets, according to the circumstances of the age and nation in which they appeared, were called, in the earlier epochs of the world, legislators, or prophets: a poet essentially comprises and unites both these characters. For he not only beholds intensely the present as it is, and discovers those laws according to which present things ought to be ordered, but he beholds the future in the present, and his thoughts are the germ of the flower and fruit of latest time.[1]

[1] Shelley, *Defence of Poetry*, p. 5.

Shelley is here making for the poet precisely the claim that I make for the genius. He is, for Shelley, the advance guard of his age, a harbinger and forerunner of the future, who foreshadows in the present the developments which the future has in store, and by expressing his convictions with regard to what ought to be in contradistinction to what is, makes those developments possible.

Now with regard to some poets we may, I think, grant that Shelley's claim is a true one, and true in the sense in which he advanced it. This is no place for a dissertation on the merits and demerits of individual poets, but without trespassing too far beyond the scope of this work, I may draw attention to the direct contribution of certain poets to the thought of their times, a contribution which gave birth to a new consciousness of the purpose and meaning of human life and the nature of human obligations. In the great Hebrew poets and prophets threatening a corrupt civilization with the moral indignation of an outraged deity, in Blake giving poetical expression to a transcendental mysticism, in Ibsen advancing a new conception of man's duty to society and obligations to his neighbour, in Hardy's ironic conception of the universe, above all in Goethe, who, while no richer than Shakespeare or Ibsen in dramatic talent, rises into the empyrean of philosophy while they are gnashing their teeth in impotent fury in the mud, or at best finding an ironic enjoyment in contemplating their own condition, there is an emergence of something definitely new in human thought and feeling.

Where the poetry is avowedly philosophic in content, this direct performance by the poet of the function of the genius as one of the standard-bearers of human thought is, as is natural, most noticeable. The best modern instance in this kind is the poetry of Hardy, who in his later years, and above all in the choruses of *The Dynasts*, gives expression to a philosophic attitude to the universe which is not far removed from the theory advanced in this book. A few quotations will indicate more clearly than further explanation what I have in mind when I speak of the poet's direct performance of the function of the genius, besides giving some further illustration of the conception which I have tried to put forward under the crude terminology of the Life Force.

Hardy conceives of the power that determines events, a power variously termed Fate, Destiny, Chance, or the Prime Mover, as a blind will, unfeeling and unseeing, which, indifferent alike to human suffering and human happiness, fares on its way because it must, dragging the universe at its heels. In its hands human beings are automata, who fall into calamity because they must,

not because they ought; if it furthers their endeavours, it furthers them without purpose; if it thwarts, it thwarts without malignity. Epithets used to describe its nature are 'viewless', 'voiceless', 'dominant', 'unmotived', 'unimpassioned', 'nescient', 'unseeing', 'above forethinking'. Above all it is unconscious and urges its ceaseless task not because it wishes, but as driven by the laws of its own nature.

> Like a knitter drowsed,
> Whose fingers play in skilled unmindfulness,
> The Will has woven with an absent heed
> Since life first was; and ever will so weave.[1]

And again of the universal immanence of the Will, of its dominance over events that seem isolated and irrelevant, we are told,

> It works unconsciously, as heretofore,
> Eternal artistries in Circumstance,
> Whose patterns, . . .
> Seem in themselves its single listless aim,
> And not their consequence.[2]

Yet this Will, though universal, is no more than the willing of all living organisms.

> A Will that wills above the will of each,
> Yet but the will of all conjunctively.

During the earlier part of the drama, and indeed throughout the bulk of Hardy's poetry, the unconsciousness of the Will is repeatedly emphasized, and, since human will is subject to it, as is a bubble to the stream that carries it, chance and circumstance reign supreme over human life. We shall see, says the Spirit of the Years in the Fore Scene to the drama,

> Man's passions, virtues, vices, crimes obey resistingly
> The purposive, unmotived, dominant Thing
> Which sways, in brooding dark, their wayfaring.
>
> The while unguessed
> Of those it stirs, who (even as ye do) dream
> Their motions free, their orderings supreme,
> Each life apart from each, with power to mete
> Its own day's measures.[3]

As the drama proceeds, however, there is a gradual dawning of a hope that the Will may become purposive, although the word is used, as in the above quotation, in conjunction with other epithets which seem to rob it of significance. Right at the close

[1] Hardy, *The Dynasts*, Fore Scene, The Overworld, p. 2.
[2] Ibid., p. 1. [3] Ibid., p. 7.

of the drama we come upon a definite statement that the Will may achieve consciousness and learn to understand, and, by understanding, to modify the events that it compels. It is to the Spirit of the Pities that the expression of this hope is committed.

> Yet it may wake and understand
> Ere Earth unshape
> And with knowledge use a painless hand.[1]

In these lines, and indeed throughout the drama as a whole, so far as its cosmic background is concerned, there is clearly foreshadowed the contemporary doctrine of emergent evolution, one aspect of which has been elaborated in this book. Now it is not so much in any strikingly new or original contribution to philosophy that the significance of Hardy's thought lies; the doctrine of emergent evolution is indeed very much in the air. The importance of Hardy's work is that in giving a poetical setting to a metaphysical doctrine which is still very largely the monopoly of biologists and philosophers, he has familiarized it to the minds of plain men. It is precisely in this capacity to give popular expression to new ideas, by bringing them out of the study into the street, that the specific function of poetry in the evolutionary scheme seems to me to consist. The poet is not the originator of what is new, but its interpreter. He takes the ideas of philosophers, preachers, and moralists, ideas which are too difficult, too obscure, too uncertain in their application, or too offensive to have exerted any general influence over men's minds, draws attention to them, interprets them so that they become intelligible, and so familiarizes them to the popular mind that they pass into the general intellectual stock-in-trade of the race.

What is the special power in virtue of which the poet is enabled to succeed where the thinker failed? We have already hinted at its nature. The secret of the poet's ability to draw attention to ideas, to win acceptance for values, and especially to communicate to the common mind changes in ideas and values that have previously passed unnoticed, lies in his ability to invest them with emotional content.

The lives of the great preachers and teachers of the world have been in the main, as we saw above, wretchedly unsuccessful. Save for a few disciples whose fanatical zeal, which insists on nothing short of the unique, complete, and exclusive discovery of truth by their master, has done him the disservice of mobilizing popular opinion against him, they have made few converts, and perished practically unrecognized. It is only after their deaths that their

[1] Hardy, *The Dynasts*, Part II, Act VI, p. 322.

work has assumed its true character as 'the germ of the flower and the fruit of later times', and for this flowering the poets are in the main responsible. For the hostile reception accorded to the ideas of the world's original thinkers, the customary attitude of the genius himself must be confessed to be partly responsible. He is liable to be cantankerous and uncompromising, to fly, like Schopenhauer, into a temper at the slightest hint of criticism, or, like Beethoven, to antagonize with his insufferable manners those who might have helped him. His statement of his message is apt to be embittered by personal grievances, and overlaid with wilful obscurity;—it is difficult to understand how Nietzsche, for example, has ever gained the attention that is now beginning to be accorded to him, so grossly obscure is his meaning. In short, whether the genius baffles like Blake and Swedenborg with gross obscurity, or whether like the Old Testament prophets he offends by continual invective, he has for one reason or another rarely succeeded in being an effective propagandist of his own thought.

The Life Force, accordingly, if I may here fall once more into my unavoidable personification, contrives at this point a second line of attack, and proceeds to tone down something of the raw novelty and uncompromising rigour of the original message, by communicating it through a more pleasing channel, the great poet. The poet's function is to win the ear of mankind, and this he does by presenting the neglected ideas in a form which will ensure their being remembered.

It is for this reason that poetry falls naturally into metre and rhythm and makes constant use of rhyme. Rhymes and rhythms have a notorious attraction for the ear of man, and cannot fail to win attention for the content expressed. In earliest childhood we evince a delight in rhythm, especially if it be monotonous. The child loves to make not only a noise but a noise with the regularity of an echo. His most constant request to his elders is not 'Do something new', but 'Do it again'. He loves swings, rocking-horses, and travelling in a train, and his earliest literature is the nursery rhyme. So that it shall rhyme and run to a well-accentuated rhythm, he cares little what his song or poem is about, such rhymes as Hickory Dickory Dock and Ride-a-Cock Horse achieving popularity not because of anything they say, but for the delightful effect of the sound and beat of the words upon the ear.

These early rhymes and jingles remain with us all our lives, because rhyme and rhythm are *par excellence* the means for attracting the attention and stamping what attracts upon the memory. Even if they are employed to convey mere facts, they make a fact,

as Mr. Robert Lynd puts it, 'doubly a fact because they make it memorable. Memorableness, after all, is one of the eminent qualities in literature. We judge the greatness of an author largely by his genius for writing memorable passages'.[1] Memory, in short, in order that it may be effective, requires some pattern, whether of metre, rhyme, or alliteration on which to fix—even the order of the kings of England or the number of days in the months of the year must be expressed in rhyming jingle to be easily remembered—and the ideas that have passed into the intellectual heritage of the race, whether they are couched in the sonorous lines of Milton, or merely in aphorisms of the 'Birds of a feather flock together' order, have all found expression at some time or place in rhymed or metrical verse. The poet's function in making second-hand ideas memorable, rather than in expressing new ones, may be deduced, therefore, from the nature of the medium which all but the most modern poets have chosen for their work. With the music of his words and the lilt of his rhythms the poet charms men's senses, and causes to steal unperceived into their minds ideas and valuations which in their crude form are ignored or derided. Thus clothing new doctrines in an attractive form he wins the attention and, through the attention, the acceptance of the common man, sugaring the pill of novelty which would otherwise be rejected. Thus if the preachers and teachers are the shock troops of evolution, the poet is the second line of attack, and enters the breach in the walls of human stupidity and laziness which has been made by those who have preceded him. To sum up, the poet is the distributor of ideas rather than their creator; and the distribution is effected by means of the emotional content with which his genius enables him to invest them.

In thus placing in sharp contrast the function of the genius as the originator of new thought, and of the poet as its distributor, I have unduly simplified the position in the interests of clarity of exposition. It is not of course strictly true either that the original genius is devoid of the art to express new thought in an attractive form, or that the function of the poet is confined, so far as his matter is concerned, to retailing at second hand the thoughts of the genius. Many great men have joined both roles in their own persons. Lucretius, that passionate atheist whose sole preoccupation was by means of science to banish superstition from the world, expounded his philosophy in verse because he wished men to remember it. In so doing he achieved poetry which has become

[1] Sir Algernon Methuen, *Anthology of Modern Verse*, Introduction by Robert Lynd, p. xiv.

more memorable than his philosophy; but for the excellence of his verse, the atomic system of Lucretius would now be forgotten. Hesiod, who desired to write a manual on agriculture, rises in his enthusiasm to the level of imaginative poetry. Tolstoy, a thinker of catastrophic originality, was as a novelist endowed by the Life Force with artistic capacity of the first order, while Hardy, as I have tried to show, has made his poetry the vehicle for the communication of a philosophy which is still in its infancy. It is a tendency rather than a sharply cut antithesis which I have been trying to describe, a tendency which I may define by saying that as originality of thought diminishes, so does beauty of presentation increase.

In explanation of this tendency three considerations may be advanced. First, the compelling force of an original pronouncement about life, the expression of the vision of the prophet or the seer, may be sufficient unaided to startle men's indifference and to win their interest; the poet so endowed can, therefore, dispense with the adventitious aids of beauty of expression. But when the poet aims at communicating 'What oft was said but ne'er so well expressed', he can devote all his attention to expressing it better and better. Secondly, the more often a thing is said, the more important it becomes to invest it with an attractiveness that will ensure its being listened to, the poet who would be sure of an audience being compelled to make up in beauty of form what he lacks in originality of matter. Thirdly, the ages in which familiar thought is presented with a more than ordinary degree of skill, in utterances which achieve a hitherto unprecedented perfection of form, e.g. the Silver Age in Rome or the Augustan Age in early eighteenth-century England, are the ages which witness a wider diffusion of thought and culture than has hitherto been achieved. In such periods we may conceive that the Life Force is concerned less to bring something new into the world than to ensure the diffusion of the old. They are periods when it may be said to mark time while the original thought of a revolutionary century, like the seventeenth, percolates through every department of life and letters in ages of culture like the eighteenth. Poetry is the medium of diffusion, and because the message of life must now win its way into regions where tradition reigns supreme, and where what has long been a commonplace of contemporary intellectual thought is still regarded as revolutionary heterodoxy, the poet must take care to clothe his thought with a more than ordinary charm, so that beauty may throw men off their guard, and his message may steal unnoticed into their hearts, while their senses are drugged by the loveliness of his words.

The poetry of Hardy on the one hand and of Shakespeare on the other offers a good illustration of my thesis that there is an inverse proportion of originality of thought to beauty of expression in the poet's work. The rugged grandeur of Hardy's verse is the continual theme of critics. By the term rugged they seek to express the fact that his style is often pedestrian and laboured, his expressions clumsy and awkward, and that he frequently makes use of words so forbidding that most writers, so far from introducing them into their poetry, would hesitate to employ them in prose. Hardy does not scruple to employ such expressions as 'impassioned essence', 'scoped above percipience', or 'The Cause of things which some of us have inkled to thee here'. There was never a great poet who wrote such ugly verse, yet never a poet whose methods were so readily excused by the compelling character of his thought.

Ibsen is another poet in whose genius the ability to think originally and the capacity to clothe his thought with beauty are joined, but in whom, as in Hardy, the thought is often too strong for its vehicle. The original force of his matter is constantly struggling against the limitations imposed by his manner, with the result that his plays produce a stark and sometimes forbidding effect. In *The Doll's House*, where he is expressing for the first time the attitude to sex and society which in the next generation was to become popular as feminism, and in *Ghosts*, where he is making some original reflections upon heredity, the manner is comparatively unimportant; in *Peer Gynt*, where his thought is the stock-in-trade of philosophers in all ages, the poet in him has free play. But neither in Ibsen nor in Hardy can the performance of the poet's function be seen unobscured by other elements, since each is too original to be purely a poet. It is when we come to a great poet who is also a comparatively unoriginal thinker, like Shakespeare, that the point I have been trying to illustrate emerges most clearly.

Literary criticism is disturbed by an ever-recurrent controversy upon the respective importance of form and content. Is it what you say or the way you say it that matters? Into this controversy I have no wish to enter. The answer that my thesis requires me to make, namely, that both of them matter and that each is valueless without the other, though platitudinous, is all-sufficient. I only mention the controversy here because it affords a convenient point of departure for a reference to Shakespeare, who is indeed a permanent stock figure in this dispute, as an illustration of the point of view I am putting forward.

Shakespeare is obviously a very great poet indeed; he is also a man of considerable intelligence, whose influence upon the world has been incalculable; yet the intellectual content of his plays is never impressive and rarely original. So little, for example, did he care about his plots that he was quite content to steal them from somebody else, getting the best of them from Plutarch's *Lives* or from Holinshed's *Chronicle*, and for the rest furbishing up old plays and adapting popular stories. Those few which do appear to be original are often silly as stories; when they are not obvious, they are quite unnecessarily complicated and obscure, nor does it appear that Shakespeare was at particular pains to tell them as clearly and simply as he could. As for the content of the plays, what Shakespeare has to say is never particularly deep or original or important. Any person of average intelligence could think of the reflections contained in his greatest speeches. The intellectual content of 'To be or not to be' is to-day familiar to the point of triteness and can never have been very new, and a paraphrase of the matter of much that must be ranked as the loveliest poetry in the language would make a good average schoolboy's essay.

Moreover, Shakespeare has no clear and definite philosophy of life. No impression of a consistent attitude emerges from a reading of his plays. Each character has a different philosophy appropriate to the character, and it is scarcely too much to say that each play has a different one too. So little importance does Shakespeare attach to philosophy, that he puts philosophers into his plays and other men's philosophies into their mouths. For these and similar reasons Shakespeare is frequently cited as an illustration of the contention that what the poet says is not particularly important; what matters is the style, the form, the expression, in brief, the way he says it. Any fool can reflect that if he wants to commit a murder he had better get it over as soon as possible, and doubt at the same time whether that will be the end of it; only Shakespeare could have thought of saying,

> If it were done when 'tis done, then 'twere well
> It were done quickly.

I do not quarrel with this point of view; it affords indeed a good illustration of my general conception of the great poet as a purveyor at second hand of the original thoughts of others. I wish, however, to add two qualifications which will serve to relate it more closely to the theory I have been putting forward. In the first place, the fact that the thought is commonplace should not prevent us from recognizing that it really is thought that Shakespeare is communicating, and, what is more important for our

purpose, philosophic thought about life as a whole. To us, it is true, this thought is not very new or very important, such famous passages as, for example, the soliloquies on the hollowness of success and the Seven Ages of Man striking the modern mind as the most elementary kind of pessimism. But an aphorism is none the less philosophic for being trite. The number of philosophic reflections about life as a whole which man has hitherto succeeded in evolving is after all not very numerous, and most of them have already been made fairly frequently. That being in love is exciting but painful, that all men are mortal, that nobody knows what will happen to-morrow, that not all rich men are happy, that those in power forget those who put them in power, that the ways of God are just but incomprehensible, and of women neither just nor comprehensible but charming, these and reflections like these form the subject-matter of most of the world's greatest literature; that the spring is a pleasant time, the sun hot, the sky blue, the grass green, and woman inconstant, is the sort of information conveyed by most of the images, metaphors, and incidental songs and lyrics with which the poets have embroidered their general themes. It seems clear, then, that until a new vision is vouchsafed to us, there is very little that is fresh for poetry to say. Granting this, however, we may still doubt whether the intellectual content of Shakespeare's poetry was as familiar to his contemporaries as it appears to us now. Shakespeare in fact appears to have succeeded in performing the function for which the Life Force created him. His thought has so passed into the intellectual heritage of the race that we seem to know instinctively all that he has to say. But that does not mean that we always knew it, or that, even if we knew it, we attended to it as we have attended since he wrote.

Shakespeare, in short, is the supreme example of the poet who, though not a sage himself, has so popularized the reflections of the sages that they have come to form the stock-in-trade of the ordinary man.

In the second place it is not to be supposed that, because the philosophy of Shakespeare's plays is often commonplace and sometimes contradictory, his works do not contain any philosophy of importance. On the contrary, the very fact that they are poetry and not music necessarily requires us, as I have already pointed out, to regard the meaning conveyed as the essential part of the whole, the peg upon which, as it were, the poetry is hung. And the meaning, familiar as we are with it, is not always intellectually negligible even to-day. Shakespeare may not himself convey any definite message, but at different times and in different places he

has given expression to most of the conceptions of life that mankind has succeeded in evolving, with a clarity, an eloquence, and a winning persuasiveness which have done more to ensure their popularization than the enthusiastic intransigeance of all the zealots who were prepared to go to the stake for the sake of those very convictions, which Shakespeare's sense of dramatic fitness and his knowledge of the technique of his art suggested to him as the contents of his celebrated speeches. There is practically no point of view about life which Shakespeare has not recorded in a form which is as immortal as the thought was unoriginal, from the sheer individualism of Polonius' affirmation, 'To thine own self be true, . . . thou canst not then be false to any man', as the supreme duty of the individual citizen, to the express admission in *King Lear* that if there is nothing more to say about the universe than is contained in the philosophy of Hamlet, then 'as flies to wanton boys are we to the gods; they kill us for their sport'. Without this admission *King Lear* would be a mere melodrama; its latent implication throughout the play makes *King Lear* the greatest of Shakespeare's works.

It is often said that a man's beliefs about the universe are determined by his temperament, his reason being employed merely to invent justifications for the beliefs he has instinctively formed. This doctrine, popularized by William James, has many variations, and in the extreme form just quoted I believe it to be untrue. But that temperament plays a very large part—though exactly how large is not clear—in determining most of our beliefs about those fundamental questions which form the subject-matter of philosophy, is a statement sufficiently moderate to claim a large measure of general acceptance. It is clear, however, that a man cannot form adequate beliefs, even at the promptings of his instincts, unless he is made aware of the various alternatives offered for his choice; and it is probably true that many men have gone through life with a creed that misrepresented and thwarted their natures at every turn, that was, in short, a complete intellectual misfit, because they never had the choice of another. It is the merit of Shakespeare to have given expression to most if not all the philosophic reflections that the race has yet succeeded in evolving on such questions as the object of life, the nature of Providence, the claims of duty, the conflict of obligations, and so forth, and to most of the variations upon them, with a charm and cogency of appeal that need leave to no man the excuse of ignorance of the alternatives for his failure to find a creed that fits him.

Shakespeare, in a word, has done more to diffuse the humanistic

ideas of the Renaissance, besides reviving the tradition of the popular classical philosophies, than all the original thinkers of his age, and he has presented these ideas in such a way that it is impossible for mankind to ignore them. We may accept or reject, but we can no longer withhold the compliment of our attention.

Summary of Argument.

In the preceding pages I have tried to show:

(1) that poetry always and necessarily conveys meaning, and in this respect is differentiated from painting, music, and other forms of what is called pure art;

(2) that the meaning is rarely new, the poet usually giving expression to the philosophic conceptions, the moral aspirations, and the general run of ideas of his day;

(3) that while seldom saying what is new, the poet says what is old better than it has been said before, investing it with an emotional content which causes it to attract men's notice and to fix itself in their memory;

(4) that as the element of originality in the poet's thought diminishes, so do the memorableness of his verse and the persuasive charm of his writing increase;

(5) that the poet is, therefore, a special case of the genius. The genius is the receptacle for the living inspiration of the Life Force; he is a creator or bringer of something new into the world, one who enriches and deepens men's understanding by reason of his peculiar vision of the meaning of life. Where the genius proper is the creator, the poet is the distributor. He clothes the message of the genius with beauty, and forces it upon the indifference of those who shut their ears and harden their hearts;

(6) that poetry, therefore, like all forms of literature, is relative and propagandist. It is concerned not with absolutes but with immediate purposes, and the drive which forces the poet to find expression is that of the Life Force seeking to universalize through him a fresh conception of the meaning and possibilities of existence. Thus poetry is essentially a mode of the stream of life. It is not a seeking after non-human truth, a finding of what is somehow there and waiting to be discovered independently of our seeking, but a form of creation which facilitates the emergence of a new level of consciousness. This is a general description of the function of poetry in contradistinction to that of art. In strict accuracy it must be qualified by two reservations. In the first place the word 'creation' must be interpreted in the special sense given to it in the last chapter. When I speak of the evolutionary function of poetry

as creative, I mean that there emerges in poetry a new vision, new in the sense of deeper and wider, of the universe. The vision, in common with all thought and insight, is to be interpreted as an awareness of what is, rather than as a creation of what is not. Yet, as I shall try to show, this awareness and the objects of it are different from the awareness and the objects of the artist.

In the second place, it is not as a rule by the poet that the new vision is first conceived. It emerges in the first instance in the direct insight of the preacher, moralist, or seer. It is only because his words fail to penetrate the hearts of men that the Life Force proceeds to clothe them in the language of the poet.

The poet, we say, expresses his genius by doing two things, each of which constitutes an essential part of his function.

(i) He conveys meaning.

(ii) He conveys it in such a way as will arouse emotion; and this he does by expressing the meaning in a beautiful form.

The question immediately arises, what is meant by the words 'beautiful form'? It is beautiful form, I say, which arouses a certain kind of emotion, the emotion to which we give the name aesthetic.

Is the beauty of poetry, then, the same as the beauty of music, are the emotions they arouse similar, and are their functions identical? These questions I shall try to answer in the next chapter.

PART II

LIFE AND THE WORLD OF VALUE

CHAPTER VI

AESTHETICS AS THE AWARENESS OF BEAUTY

INTRODUCTORY.

IN Part I I have tried to outline a theory of life which presupposes a fundamental dualism between life and matter. I have sought to explain the mind-body relationship in terms of the interaction of life with matter, and sense-perception as the awareness by life of matter. In this part I shall try to establish the existence of a third independent factor or element in the universe, namely, the element of value, and I shall represent evolution as a process in which life advances from the awareness of matter to the awareness of value. At present the world of value is revealed in uncertain and intermittent experience, which is for the most part not direct experience of the world of value, but of copies or representations in matter of the patterns and arrangements which belong to that world. The object of life is, I shall affirm, to emerge at a level at which it is continuously and directly aware of value.

Our apprehension of value at the level at which life has at present emerged is mainly of two kinds, to which we give the names of aesthetic and ethical experience respectively. Aesthetics and ethics are, in other words, the spheres in which we catch our first glimpse of the world of value. This and the following chapter will deal with these two types of experience; I shall try to establish their unique character and to analyse them in terms of life's awareness of two objects of value, namely, beauty and goodness, or rather of the representations of beauty and goodness in the material world. I shall then attempt to indicate in general terms the characteristics of the world of value, which I shall also call the 'real' world, and to describe the relationship subsisting between it and the world of becoming, which is the world in which life evolves, as illustrated by life's apprehension of value.

Although the awareness of what I have provisionally called the 'real' world is undoubtedly involved in bona fide ethical experience, our intimations of value come to us more particularly in connexion with that experience of beauty to which we give the name of aesthetic emotion. As Plato says in the *Phaedrus*, Beauty alone among the Forms is seen in the world of becoming as she

really is.[1] Without committing myself to all that Plato's assertion implies, I am prepared to agree that our experiences of beauty are more vivid and frequent than our experiences of goodness or truth, or indeed of any other form of value. Taking Plato's hint, therefore, I propose to consider in this chapter the nature of what is called aesthetic emotion, which I shall endeavour to interpret as the awareness of a unique and independent object belonging to the world of value, and of the representations of that object in the material world. The object in question I shall call beauty, and I shall refer to those material objects in which beauty is expressed or reflected in a sense to be hereafter described as objects possessing aesthetic value.

I. THE OBJECTIVITY OF BEAUTY.

It is, I think, in our experience of music that the clearest evidence for the uniqueness of aesthetic emotion and for the objective character of that upon which it is directed is to be found. Before, however, we can proceed to consider this evidence, it is necessary to establish the objectivity of beauty as a general concept. By the phrase 'objectivity of beauty as a general concept' I wish to imply that beauty is an independent, self-sufficient object, that as such it is a real and unique factor in the universe, and that it does not depend for being what it is upon any of the other factors in the universe. I mean further that when I say that a picture or a piece of music is beautiful, I am not making a statement about any feeling that I or any other person or body of persons may have or have had in regard to it, or about a relation subsisting between my mind or the mind of any other person or body of persons and the picture or piece of music in question, but that I am making an assertion about a quality or property possessed by the picture or piece of music itself; and that the assertion is to be taken to imply that in virtue of the possession of this quality or property, the picture or piece of music stands in a certain special relationship hereafter to be defined to the world of value in general and to beauty in particular.

With a view to establishing this position it will be desirable to consider two alternative views which are frequently put forward in explanation of what it is that we mean when we say that a work of art is beautiful, and to indicate the objections to which they are exposed. If these views can be satisfactorily disposed of, I shall

[1] *Phaedrus*, 250. 'But of beauty I repeat again that we saw her there shining in company with the celestial forms; and coming to earth we find her here too, shining in clearness through the clearest aperture of sense. . . . But this is the privilege of beauty, that she is the loveliest and also the most palpable to sight.'

have advanced some way in the direction of proving by process of elimination that the meaning which I wish to give to the statement 'this work of art is beautiful' is the right meaning.

1. *Subjectivist accounts of beauty.*

The antithesis of the view that I am advocating is the extreme subjectivist position which is adopted by Tolstoy in *What is Art?* Tolstoy identifies art with the communication of emotion. When a man tells a story, composes a song, or paints a picture with the object of communicating an emotion to others, then there is art; when the emotion is new and springs from a fresh religious attitude to the world, then there is good art. The effect of this is clearly to make the value of a work of art depend at least in part upon the receptivity of its audience. Tolstoy is careful to guard himself against the (Crocean) view that art is expression of emotion; the emotion of the artist must, he says, be *communicated*; if it is not, then the art is poor.[1] Now the extent to which an emotion can be communicated to others is clearly dependent upon the receptivity of those who experience it, and if you proceed, as Tolstoy does, to make the merit of a work of art proportional to the amount and intensity of the emotion it calls forth, the criterion of its value must be sought not in some intrinsic characteristic of the work itself but in the nature of the feelings entertained in regard to it.

This would mean that beauty is not an objective and inherent quality of works of art, but is resolved, in so far as the word 'beauty' retains any meaning at all, into a type of emotional effect, this effect consisting in the feelings which persons who appreciate the work of art which is said to be beautiful entertain in regard to it; the more people like it, in fact, the better it is. Tolstoy, as is well known, did not shrink from this conclusion, affirming that, inasmuch as Russian peasant songs have a wider appeal than *Hamlet*, producing, that is to say, a feeling of pleasurable emotion in more persons than *Hamlet* does, they are superior to *Hamlet* as works of art. This is in effect to make the criterion of beauty consist in a counting of heads.

It is to be noticed that no considerations of quality are permitted to enter into this assessment. To say that one work of art is better or of higher quality than another is meaningless, unless it

[1] Tolstoy, *What is Art* (Oxford, 1924), pp. 171–4. See especially the definition on p. 173: 'To evoke in oneself a feeling one has experienced and, having evoked it in oneself, then by means of movements, lines, colours, sounds or forms expressed in words, so to transmit that feeling that others experience the same feeling—this is the activity of art.'

means that the first work succeeds in communicating more emotion than the second. Similarly 'more emotion' cannot be interpreted as meaning aesthetically more valuable emotion, since no meaning is assigned to aesthetic value except in terms of communicated emotion, and the only standard by which we are entitled to assess communicated emotion is a quantitative one. Thus once again the only criterion of aesthetic value is the quantity of pleasurable feeling aroused in the audience or spectators, from which it follows that the most valuable work of art is that which is most liked. It is customary to make a distinction between what is good and what we like, and most people would admit, at any rate in theory, that because of a deficiency in taste they may fail to like that which they know to be good, and like that which they know to be bad. But for Tolstoy's theory no such distinction exists; there is no difference between liking a work of art and knowing it to be good. To say that we know it to be good is merely another way of saying that we like it, the former statement being in fact incapable of any other meaning. This theory is the exact counterpart of those hedonistic theories of ethics which abolish the common distinction between what is desirable and what is desired, by denying to the word 'desirable' any meaning except in terms of what actually is desired. Just as for this type of theory the statement 'you *ought* to do this because it is good' has no meaning in ethics, so the statement 'you *ought* to like this because it is beautiful' has no meaning in aesthetics.

It is not possible to refute extreme positions of this type by logical argument, any more than it is possible to disprove the somewhat similar hypothesis of the solipsist in metaphysics. Although irrefutable by argument, the Tolstoyan theory possesses nevertheless considerable importance from the dialectical point of view. Its importance arises in this way: there are a number of theories of aesthetics which look for the criterion of value to the effect produced by a work of art upon the mind or minds of some person or body of persons, or which find it in a particular kind of relationship between the work in question and some mind or body of minds. These theories, like the Tolstoyan, issue in the conclusion that beauty is subjective; but the conclusion is not so easily detected. It is exceedingly important, therefore, to be able to show that these theories whose subjectivist tendency is disguised do in fact reduce themselves to this Tolstoyan position whose subjectivism is open and avowed. Having effected this reduction, we may then proceed to point to the obvious fact that each and all of these positions, including both the extreme subjectivist view and the

disguised, do in fact totally fail to explain or to provide for the unique character of our feeling for beauty.

This, indeed, is so obvious that, so far as the extreme Tolstoyan view is concerned, few people to-day would venture to defend it. There are, however, many who, in order to avoid committing themselves to the admission of the objective and independent status of beauty and the unanalysable character of the emotion we feel for it, adopt one or other of the various theories of disguised subjectivism which, by disavowing the crude simplicity of the Tolstoyan view, seek to evade the charge of having analysed beauty into pleasurable states of feeling. It is important, therefore, that we should be able to show that these alternative positions do in fact reduce themselves to the complete subjectivity which Tolstoy frankly embraced. I will consider two of them from this point of view.

(*a*) It may be said that although the value of a work of art is ultimately to be assessed in terms of the feelings which it arouses, it does not, therefore, follow that we have simply to count heads. If, for example, we take a Bach fugue, which we will call (*x*), as an example of good art, and a drawing-room ballad (*y*) as an example of inferior art, it may be admitted that (*y*) causes pleasurable feelings to numerically more people than (*x*). But (*y*) is not, therefore, proved to be superior to (*x*), since those in whom (*x*) causes pleasurable feelings are more entitled to judge of the comparative merits of the two works of art than those who prefer (*y*). It may and can be shown that those who possess a technical knowledge of music, who have spent their lives in its study and whose experience enables and entitles them to sift the valuable from the worthless, who have, moreover, listened both to (*x*) and to (*y*) on numerous occasions, unanimously prefer the former. For this reason, therefore, we are justified in saying that (*x*) is superior to (*y*) since it is preferred by those of mature taste. It may further be urged in support of this view that with regard to all the greatest works of art, the plays of Shakespeare, the Preludes and Fugues of Bach, the paintings of Cezanne, there is a sufficient consensus of opinion among experts to justify us in unhesitatingly asserting their value. There is also an appeal to the effect of time and the judgement of posterity.

The argument, therefore, amounts to this: (*x*) is preferred by those who are entitled to judge; it is, moreover, preferred by them throughout a longer period, being still admired when (*y*) is forgotten : therefore, since it is more liked in the long run and appeals to a better taste at any given moment, it is superior to (*y*).

In other words, although more people may prefer (*y*) at any given moment, they are not the right kind of people, and they are probably fewer in the long run.

Thus the ability to evoke pleasurable feelings in persons of good taste is substituted for the ability to evoke the greatest quantity of pleasurable feelings on the whole as the standard of beauty.

There are two difficulties about this view. The first is that the consensus of opinion among experts to which appeal is made is non-existent. There is no work of art whose value is admitted to-day which has not at some time or other been roundly condemned by experts, just as there is no canon of morality that has not been questioned by good men. Experts of the same generation are in perpetual controversy with one another over contemporary work, and at perpetual variance with experts of the preceding generation over the works of the past. Tastes change, and the consensus of one generation, in so far as it exists, is often diametrically opposed to that of another. Speaking broadly, we may say that each generation of experts tends to take the gods of its grandfathers off the shelf upon which its fathers have placed them. We cannot, therefore, define our expert simply as one who knows what is valuable in art and who in virtue of his knowledge subscribes to an admitted consensus of opinion.

How, then, and this is our second difficulty, are we to define the expert, by an appeal to whose good taste the merit of a work of art, or in other words, the criterion of beauty is to be established? Training and experience, which might have been expected to assist us in framing a definition, prove but halting guides; men who have had the advantages of both frequently prefer (*y*) to (*x*) and show their preference by visiting and praising musical comedies and going into raptures over dance-music, drawing-room ballads, or tone-poems. Nor does agreement with the assumed good taste of others provide the hall-mark we require; the obligation to define good taste in others by agreement with which the taste of an expert is to be authenticated, is rapidly found to involve us in a vicious circle, apart from the fact that, as we have already pointed out, such agreement is noticeably to seek.

Failing a satisfactory definition from other sources, we are forced in the long run to define the expert by reference to the judgements in which his taste expresses itself. The expert, we shall say, is the man who recognizes what is good and likes it; he is, in other words, the sort of person who prefers (*x*) to (*y*). Thus in attempting to escape from the impasse of complete subjectivism by the appeal to experts, we find ourselves completing a vicious circle.

The argument now runs as follows. By what criterion are we to judge (x) to be superior to (y)? Answer, by the consensus of opinion among persons of good taste, who unanimously prefer (x). By what characteristic are we to recognize these experts whose judgement is to be trusted to establish the superiority of (x)? Answer, they may be known by the fact of their universal preference for (x).

If, then, the appeal to quality of taste as a criterion of aesthetic value breaks down owing to the impossibility of defining what we mean by quality except in terms of judgements about the works of art whose value is in question, we are reduced to the crude subjectivist position of assessing the value of a work of art in terms of the amount of pleasurable feeling it excites.

(*b*) It may be said that aesthetic value is not to be assessed in terms of the feelings which any person or body of persons entertains towards a work of art, but is a quality of the relation which subsists between knowing mind and object known. If A is a picture, B the knowing or appreciating mind, and R the relation which subsists between them when B knows A, we may say (i) that beauty or aesthetic value cannot be a quality of A taken alone, since this would be tantamount to asserting the objectivity of beauty in the sense for which I am contending; (ii) that it is not a quality of B taken alone, since this, like the view already considered that aesthetic value depends upon or is relative to B, leads to a crude and unacceptable subjectivism, and that, therefore, (iii) aesthetic value must be a quality of R.

This view is frequently found in conjunction with an Idealist theory of knowledge. It is inconceivable to many that there should be beauty in a world of objects which is not and never has been perceived by any mind. Objects, it may be said, cannot be beautiful independently of minds to appreciate them, just because they cannot exist independently of such minds. Even if we were to suppose that they could exist independently of knowledge, they are nevertheless insensibly transformed in the process of being known, so that the object as known is different from the object prior to its entry into knowledge. It is only of the object as known that beauty can be affirmed, of the object, that is to say, as standing in a certain relation to the knowing mind. Hence it is of the object as related to mind that we predicate aesthetic value, or in other words, beauty only comes into existence when there is a certain relation R between A and B, namely, the relationship which consists in A being known by B. We may further refine on this, and say that beauty is an epiphenomenon that supervenes upon the

union of mind and object, when the object is of a certain class and the mind in a certain state or condition.

This view seems to be open to a number of objections, of which I will mention three.

(i) It is not asserted that it is upon the union of mind with any known object that beauty supervenes, but only upon the union with objects of a certain class, those, namely, which, when rightly appreciated by a mind in a certain condition or state of development, are capable of entering into a relation of which aesthetic value can be predicated. Now the property of belonging to a certain class is a property which the object possesses in its own right, independently, that is to say, of its entry into the knowledge relation. If we call the property (x), we may say that it is only objects which are independently qualified by (x) which are capable of entering into the aesthetic relation. But in thus postulating the independent possession by an object of a property which is essential to the occurrence of what is called aesthetic experience, we are in fact affirming the objective basis of aesthetic value.

(ii) The view in fact reduces itself to the subjectivism which it seeks to avoid. We are asked to believe that beauty is a property neither of A (the picture) nor of B (the mind), but of R when R is the relation between A and B. Now the relation of the mind to a picture which it appreciates is obviously different from its relation to a picture which it dislikes. R therefore varies as A varies; it also varies as B varies, since the same mind may entertain different feelings towards the same picture at different times. Since R varies with B, it is partly dependent for its characteristics upon the characteristics of B; beauty, therefore, which on this view only comes into existence when R is of a certain kind, which is, in other words, one of the characteristics of R, is itself dependent at least in part upon the characteristics of B. Beauty, therefore, is not an objective entity existing independently of mind in its own right; it is a characteristic of a relation, which varies with and is therefore dependent upon the existence of a certain attitude of mind, or, more accurately, of certain states of feeling. Aesthetic value, in other words, is subjective; the extent to which it will characterize the relation between a mind and a particular work of art depends at least in part upon the sentiments which the perceiver experiencing the work in question entertains in regard to it; if these sentiments are hostile, or if they do not exist, the relation will not be the required character, and we are not entitled, therefore, to say that the work of art is beautiful.

(iii) The third objection is one of a general character which

springs directly from and presupposes a realist theory of knowledge. It is only valid, therefore, in so far as we have on other grounds adopted a realist theory. The view we are considering appears to rest upon a confusion between object and apprehension of object. An object apprehended is, I have affirmed in Chapter III, necessarily different from the apprehension of it; it is indeed only because it is different that it can be apprehended. If, therefore, the knowledge of (x) is different from (x), the elimination of the one cannot affect the other; the presence or absence of knowledge cannot, that is, affect the qualities of the object known. If, therefore, the object possesses the quality of being beautiful, nothing that happens in or to any mind that may be apprehending the object can possibly affect its beauty, which will be no more enhanced by appreciation than it will be diminished by disparagement. That which is affected by the presence or absence of mind is not beauty, but the appreciation of beauty. Unless, therefore, we identify apprehension of object with object apprehended, it will follow that it is the appreciation of beauty only which is subjective, and that beauty itself, being unaffected by the presence or absence of appreciation, is objective.

Nor is it only theory of knowledge that shows such an identification to be inadmissible; the language of ordinary aesthetic experience testifies to its impracticability. If there is no ultimate distinction between aesthetic object and apprehension of aesthetic object, we can for beauty read 'appreciation of beauty'. It follows that when we admire a beautiful sunset, we are in fact admiring our admiration of a beautiful sunset; that when we pass strictures about a work of art for lack of design, it may be, or faults of perspective, we are in fact making uncomplimentary remarks about a process which is going on in our own heads, and that when we praise a piece of music, the object of our regard is really our own sentiments. It follows, too, that we are precluded from having a direct experience of any aesthetic object, since our appreciation of that object insists on intervening between us and the experience, and becoming itself the object of experience.

Thus the position that the existence of beauty is or is dependent upon the existence of a mind to enter into relation with the so-called beautiful object leads to results which amount to a *reductio ad absurdum* of the subjectivist position.

Let us, finally, suppose that all the people in the world are abolished but one. Let the sole survivor of humanity—and for the moment we will assume that there is no such thing as a divine mind—be confronted with the Sistine Madonna of Raphael. This

picture, it will be said by subjectivists, is still beautiful because it is being appreciated. Suppose further that in the midst of the last man's contemplation of the picture he too is abolished. Has any alteration occurred in the picture? Has it experienced any change? Has in fact anything been done to it? The only change that has occurred is that it has ceased to be appreciated. Does it therefore automatically cease to be beautiful? Those who hold the subjectivist position must maintain that it does, and, as I pointed out above, there is no logical disproof of their contention. Yet, although it cannot be disproved, I maintain that it fails to make provision for the undoubted fact that we all of us do think that it is better that an uncontemplated Madonna should exist than an uncontemplated cesspool. It is the existence of this undeniable human sentiment which suggests that it is only through confusion between the appreciation of beauty and the beauty appreciated that philosophers have been led to think that it is impossible to conceive of beauty which is not perceived by mind.

It is sometimes urged at this point that although beauty may still attach to the uncontemplated Madonna, the beauty has lost its value. It is no longer significant. What non-significant beauty can mean, if it is not an alternative expression for non-contemplated beauty, it is not easy to discover. But in what sense can it be maintained that no value attaches to uncontemplated beauty? Professor G. E. Moore has dealt with the point in his *Principia Ethica*, chap. iii, p. 83, § 50.

> Let us imagine one world [he says] exceedingly beautiful. Imagine it as beautiful as you can: put in whatever in the world you most admire—mountains, rivers, the sea, trees, sunsets, stars, and moon. Imagine all this combined in the most exquisite proportions, so that no one thing jars against another, but each contributes to increase the beauty of the whole. And then imagine the ugliest world you can possibly conceive. Imagine it simply as a heap of filth, containing everything that is most disgusting to us for whatever reason, and the whole, so far as may be, without one redeeming feature. . . . The only thing we are not entitled to imagine is that any human being ever has or ever by any possibility can see and enjoy the beauty of the one or hate the foulness of the other. . . . Is it irrational to hold that it is better that the beautiful world should exist than the one which is ugly?

To answer that it is irrational, is a hard saying, and it is one to which most subjectivists seem averse from committing themselves. Whatever be the meaning of beauty, we must, I think, answer that it is better that a supremely beautiful world should exist than a supremely ugly one, even if we can never behold either of them. And this, I think, constitutes a cogent argument against those

who hold, either that objects which are not perceived cease to be beautiful, or that, even if they are still beautiful, their beauty has no value.

For these reasons I contend that beauty is not a quality of nor is it dependent upon a relation between an object and a mind or a group of minds. The position that beauty is a quality of or is dependent upon a certain feeling or set of feelings entertained by a mind or body of minds, has already been discussed under (*a*) above, and although we have not been able to bring forward arguments of a logical character against this position, we have convicted it of inability to explain the uniqueness of our feeling for aesthetic value. If, then, beauty is not a quality of a knowing mind nor dependent upon a knowing mind, nor a relation between knowing mind and object known, the only alternative seems to be that it is a quality of the object known. This, then, is the position that I propose to maintain.

2. *Beauty as objective.*

That we commonly make statements such as 'this picture is beautiful' or 'this picture is better than that' is undoubted. Now the plain man would certainly maintain that his intention in making statements of this kind is to describe some quality possessed by the picture. It would also appear prima facie that since the quality in question is believed to be an attribute of the picture, the attitude of mind implied by such statements is one of discovery or of recognition; on coming to look at it, he *realizes* or *notices* that the picture is beautiful, and in saying that his realization that the picture is beautiful involves an attitude of discovery, we are implying also that what is discovered exists independently of the discovery. What I maintain is that these common-sense assertions do represent a truth concerning aesthetic emotion and the object upon which it is directed; I believe, that is to say, that beauty is as truly a quality of a picture as its shape, and that whatever reasons there are for regarding the latter as independent of the observer apply also to the former. We have already advanced some way towards this conclusion by a discussion and elimination of alternative views; we have now to consider the positive reasons for it.

The best positive statement of the grounds for the position advocated is that given by Plato; it constitutes part of the general argument for the theory of Ideas. This argument falls into two parts. First, for reasons into which it is not necessary to enter, the sensory world is shown to be in a constant state of change or

flux. Nothing in it completely *is*; it is always half-way on the road to being something else. Further, no two persons entertain the same opinion about it, the qualities which it is thought to exhibit being relative to the state of the perceiver's mind and also of his body: it is therefore, according to Plato, impossible to obtain certain and agreed knowledge about the sensory world. Yet science and still more mathematics show that certain and agreed knowledge is possible; it cannot, therefore, be about the changing qualities of the sensible world but about the perfect archetypes of which the sensible qualities are but imperfect models.

Secondly,[1] if we consider such an entity as 'whiteness', it is clear that it is not of any white object, snow or cream, of which we are thinking; nor is it of the sum total of all such white objects. Yet in considering whiteness we are clearly thinking about something, both because it is impossible to think about nothing and because a thought of whiteness is different from a thought of blackness. Nor can it be said that this 'something' is merely a mental concept, an idea in our own minds, dependent on our minds for its existence. Snow would still be white, or would still be qualified by that property in virtue of which we call it white, even if no mind were aware of the fact. Since, therefore, whiteness would still be predicable of snow even in the absence of minds to be aware of the fact, we may say that whiteness is not dependent for its existence upon mind. But if whiteness is other than white objects, if it is also non-mental and independent of mind, and if nevertheless it is clearly something, there seems to be no alternative but to place it in the category of real objects to which Plato assigns the Forms; it is, that is to say, a permanent and immutable object, non-mental and non-material, which is the cause of the common quality which different white objects possess, and in virtue of which we call them white. Hence, we arrive at the world of Forms which are objects of thought and not of sense, and stand in the same sort of relation to mind as the subsistent objects described in Chapter III. The subsistent objects differ from the Forms in three important respects. They are not, in virtue merely of the fact that they are subsistent, objects of value and entitled therefore to reverence, although some of them may in fact be valuable; they do not own a higher reality than that of the physical world, and they are not the cause of the existence of physical objects.

[1] I am combining a number of different arguments scattered up and down the *Dialogues*. The argument in the actual form in which it is here given does not occur anywhere in Plato.

Although, however, beauty is a subsistent object so far as its relation to the sensible world is concerned, it belongs to a special class of subsistent objects which are distinguished from the main company of such objects in that they are recognized as possessing value. In respect of its possession of value, beauty may be included among Plato's Forms as an object of reverence revealed to insight. To the question of the relationship between subsistent objects, physical objects, and objects of value I shall return in a later chapter, where I hope to discuss the general questions involved.[1] In the present chapter I shall be concerned with the special case of the relation of the Form of Beauty to aesthetic objects.

Applying Plato's theory of Forms to aesthetic objects, we are enabled to give a meaning to statements such as those made above to the effect that (x) is a good picture, or that (x) is a better picture than (y). By the first statement we shall mean that there attaches to the picture (x) a definite quality or property in virtue of which it arouses a certain kind of emotion in us as a result of which we call it beautiful; by the second, that one picture possesses this quality in a more eminent degree than another. The pictures do not, however, depend for their possession of this property upon any mind or body of minds either in the present, past, or future, nor is the property relative to any mind or body of minds. It follows first, that it is not necessary that a picture should be appreciated by mind in order that it may have the property; secondly, that its possession of the property is not affected by the various judgements that may be passed in regard to it in different generations or by different people in the same generation, as to whether it has the property or not. I wish to emphasize this second point, because the notorious differences of aesthetic valuation which amply justify the generalization that there is no single work of art of first-rate importance that has not been frequently condemned by competent persons, are often advanced as an argument in favour of the view that beauty is subjective, or is at any rate relative to taste. On the theory here put forward, however, it is clear that the different estimates of the value or beauty of a picture that may be advanced no more imply that the picture has no aesthetic value in its own right, than the varying guesses that may be made as to the temperature of a room prove that the room has not a temperature which is independent of and unaffected by the guesses. But just as it is possible for some of the guesses to be more correct than others, so will some of the judgements of the aesthetic value of a picture be nearer the truth than others.

[1] See for this discussion Chap. IX, pp. 380–4.

This assertion is perfectly compatible with the further assertion that it is impossible to know with certainty which of the conflicting judgements is in fact nearer to the truth, impossible, that is to say, except to a mind which has a direct knowledge of the Form of beauty itself, and the possessor of such a mind will not, for reasons into which we shall enter later, be in a position to explain the grounds upon which he pronounces one of the conflicting judgements to be more correct than another.

We define a person who consistently passes judgements on the aesthetic value of works of art which are reasonably near the truth or which are nearer the truth than those of most, as a person of good taste. It follows from what has just been said that it is not possible to decide with certainty who is a person of good taste and who is not. This result appears to be borne out by experience. Certain broad generalizations as to the conditions necessary to the passing of reasonably accurate judgements have, however, been established by the experience of mankind. There are times with all of us when we are blind to beauty; a certain tranquillity, an even temper of mind must first be achieved. All the religions and all the philosophies have insisted that we must somehow escape from the turmoil to catch a vision of beauty; while the water is troubled it cannot reflect the sky, but that does not prevent the sky being there for reflection.

The possession by the picture of the quality in virtue of which we say that it is beautiful or has aesthetic value is due, then, to a special kind of connexion between the picture and the Form of Beauty. As stated above, I propose to discuss in a later chapter the nature of this connexion, and hope to advance reasons against the Platonic view in so far as it represents the picture as *participating* in the Form of Beauty. For the present it will be sufficient to anticipate the result of this discussion by asserting, without attempting to defend the assertion, that, in my view, the connexion is one which can best be expressed by saying that the object of art is beautiful in so far as it copies or reproduces the patterns and arrangements that subsist in the real world. It is these patterns and arrangements of the real world which are the source of aesthetic value and which I conceive after the model of Plato's world of Forms as immutable, eternal, and self-subsistent, that we may suppose Plato to have compendiously described by the expression 'the Form of Beauty'.

Since the criterion of the beauty or aesthetic value of a work of art is to be found in its possession of a quality which belongs to it in virtue of its special connexion with the Form of beauty, it is

clear that it is not to be sought in any relation which the picture may or may not have to the purpose of the artist, or in his success in executing that purpose. All questions relating to the power and originality of the artist's conception, to the extent to which he has succeeded in embodying his conception in the work of art, to the nature of the effect which he may have intended to produce or to his success or failure in producing that effect, to the ability of his work to arouse emotion in the spectators, whether it be the emotion which the artist himself has felt and which is, therefore, communicated emotion, or some other emotion, are, therefore, irrelevant to the question of the beauty of the work of art. Considerations of this kind neither constitute a criterion of beauty nor do they provide a meaning for the term. The only consideration that is relevant to the value of the work of art under discussion, the only question that we are entitled to ask in respect of it is, Does it or does it not exhibit the quality in question? If, as Plato would say, it participates in the Form of Beauty, or if, as I should prefer to put it, it possesses significant form, by virtue of the fact that it reproduces the structure of reality, it is beautiful and has value; if it does not, it has none. And the reason why aesthetic criticism is relative and empirical and lacks the authority and precision of science, is simply that no certain or agreed pronouncement can be made on this question.

Such is the bearing of Plato's general theory of Forms upon the meaning of the assertion that a particular work of art is beautiful or has aesthetic value. But Plato has something to add with particular reference to the Form of beauty. He describes this Form in greater detail than any of the others, and asserts in the passage in the *Phaedrus* quoted above,[1] that beauty alone among the Forms is apprehended by the soul in the world of becoming as she really is. What he has to tell us on the subject amounts nevertheless to little more than a series of hints. These hints are chiefly concerned to throw light upon the nature of our appreciation of beauty, both as she is manifested in works of art and other material media, and as she is revealed direct to the philosopher. First there is the famous account in the *Symposium* of the grades or stages in the apprehension of the Form.[2] Plato describes the ascent of the soul from the apprehension of beauty in the sensible world, to the direct vision of the Form of beauty in the intelligible world. In this ascent there are three stages. A man begins by appreciating the beauty of one beautiful object or shape; he then advances to the stage in which he can appreciate several beautiful objects and realizes that

[1] p. 266. [2] Plato, *Symposium*, 210.

beauty is a common property belonging to many different things. The next stage is the apprehension of abstract beauty, that is, the beauty of laws and institutions. But the knowledge of the Form of beauty is not yet. Perseverance and aptitude in the study of the abstract beauty of stage three are required. We learn, moreover, in the seventh book of the *Republic* that the method by which a man approaches nearer to the true vision of the Form is by an arduous study in that branch of knowledge which is farthest removed from illusion, that is, in the exact sciences of measuring, weighing, and counting, namely, the Theories of Number, Geometry, Stereometry, and Astronomy;[1] and it is for the reason that he has had no training in weighing and measuring and calculating that it is said of the artist in the tenth book that he will never attain to a perception of the Form itself.[2] After prolonged study of this kind will come the sudden apprehension of the Form. This is described in the *Symposium* in the language of a mystical vision. 'And at last the vision is revealed to him of a single science which is the science of beauty everywhere.'[3] In the seventh epistle Plato says that the knowledge of the Forms cannot be put into words like other kinds of learning, but that suddenly, after much study and familiarity with the pursuit of them, light whereby they may be beheld springs up in the soul like flame from a fire. This final apprehension is a kind of intuition, a mystical flash entirely divorced from the purely logical and mathematical processes of study which necessarily precede it. The vision follows logically from and is conditioned by the leading-up process; but in itself it is distinct and unique, involving both immediacy and separation from self. Then will it be seen that all other beautiful things are beautiful only in so far as they participate in the true being of beauty.[4]

Two conclusions emerge. The first reveals the Form of beauty as the origin of the aesthetic value which belongs to the objects of the sensible world; this I have already discussed, and have attributed the aesthetic significance of sensible objects to their ability to reproduce the forms or patterns of the real world. According to the second, the extent to which a particular work will or will not have that relation with the Form of beauty which Plato variously describes as participation by the work of art in the Form and as manifestation of the Form in the work of art, depends upon the vision of the artist. If he has himself seen the Form, then the work will possess the quality of significant form in virtue of which we say that it has aesthetic value; if he has not, no amount of training,

[1] Plato, *Republic*, Book VII, 525–8.
[2] Ibid., Book X, 602, 603.
[3] Plato, *Symposium*, 210.
[4] Cp. Plato, *Symposium*, 211.

no mastery over technique will enable him to create beautiful works. It does not therefore follow that training and technique are useless; on the contrary the best recipe for ensuring the revelation of the vision of the Form, and the consequent creation of works of art, is for the artist to discipline himself strictly in the exact sciences of measuring, weighing, and counting recommended by Plato.

Translated into modern terms, this means that an artist who has perfected himself in the technique of drawing and painting, or in the theory of harmony and the details of orchestration, or who pays strict attention to the rules of rhythm and metre, will be more likely to produce a work of beauty than one who sets about his task uninstructed and without study. But such training and study will not enable the artist to command the Form, or to ensure that beauty will clothe his work. The coming of the Form knows no law. It is the incalculable element in all art; it can neither be compelled nor cajoled.

And this would seem to be the reason for the fact so often noted that works of the greatest elaboration and technical skill are yet not great works of Art. This explains also why beauty attaches to the work of some men who, like Walt Whitman, disregard all rules, and throw all canons of taste overboard, whilst it eschews the laboured productions of those who, like some of the Augustan poets, follow rigorously and with perfect taste the best traditions of the elders. But it is equally true that the Form of beauty is more likely to be attracted by a knowledge of rules and of technique than where such knowledge is absent, and that, other things being equal, erudition and skill are more likely to produce works of beauty than so-called inspiration which is devoid of them.

This is as far as Plato takes us. In the last resort the apprehension of the Form in virtue of which an artist is enabled to produce work of aesthetic value is left unexplained. Effort and training help, but they are not sufficient; whether the artist philosopher's search will be rewarded by a vision of reality lies upon the knees of the gods. But this at least is certain, that if his vision is not refreshed by the Form of beauty, however fleeting the glimpse, then, although he may by accident produce works of value, he will not know that they are beautiful. It is with this somewhat arbitrary revelation of the Form to the artist as the origin and source of aesthetic value in the work of art that Plato leaves us. Can we not, in the light of the theory of evolution sketched in Part I, carry our account a stage farther? I think that we can; in making the attempt, however, I shall be content at this stage merely to state a position to be defended in later chapters.

The evolution of life I have defined in terms of an advance in the scope and subtlety of awareness. Beginning with an awareness of the constituents of the physical universe, life has already reached a level at which it is in thinking more or less permanently aware of subsistent objects. During the period of recorded history the possibility of a further advance has become apparent; there begin, that is to say, to be fleeting intimations of a new type of object of which life is now for the first time aware. Like the subsistent object this new type of object is eternal, non-material, and self-sufficient; but it is differentiated from the subsistent object by its possession of what we call value. Of its company are beauty, goodness, and truth. Plato was the first to recognize that these three entities were in some unexplained way different from the other Forms, and was constrained to give them a place at the head of his hierarchy of reals, thus making a distinction for which no adequate ground can be found in his philosophy. To me they seem to be differentiated from all other subsistent objects in respect of this quality of possessing value, and to be the source (in a manner to be hereafter explained) of such value as is found to attach to sensible objects.

Following up Plato's hint as to the superior accessibility of the Form of Beauty, we may say that life having emerged at a level at which it becomes for the first time capable of the awareness of value, finds the medium in which value is chiefly manifested to be those works of art which we call beautiful. This at least is true of the ordinary man who is capable of apprehending only such value as the artist makes plain for him. But in the artist himself life expresses itself at a higher level as a capacity for apprehending value in the world of nature and the forms of sound. Of the artist's apprehension at the present stage of life's development two conclusions may be affirmed. First, it is fleeting and intermittent and can neither be commanded nor retained; secondly, it is attained only by those whom I have likened to evolutionary 'sports' on the mental plane, in whom the capacity for awareness has emerged at a higher level than in the rest of the species.

There are in the sensible world combinations, whether of line and colour or of sound, which reproduce albeit obscurely the patterns and arrangements that characterize the real world. The perception of these combinations by the artist is attended by the thrill of excitement which Plato describes in his mystical account of the manifestation of the Form of beauty. The vision passes, but the artist recalling its outlines sets to work to reproduce in a material medium, either in paint, in stone, or in sound, the forms and patterns which he has momentarily glimpsed. Hence pictures

and statues and pieces of music have value in proportion as the artist's vision has enabled him to grasp, his memory to retain, and his skill to reproduce or copy the patterns and forms of the world of value whose copies he has perceived in the sensible world. When this reproduction has been achieved, the work of art is, to use Plato's language, made in the likeness of the Form of beauty. Further, the artist, in virtue of his skill, enables the spectator to recognize in his work the outlines and patterns of the world which he, the artist, has first apprehended in a material medium. And the spectator, viewing for the first time, though in the copy of a copy, the image and likeness of the real world, is thrilled with the same emotion as that which was excited in the artist by his perception of value in natural objects.

> For, don't you mark, we're made so that we love
> First when we see them painted, things we have passed
> Perhaps a hundred times nor cared to see.[1]

The spectator experiences vicariously the emotion which the artist has felt for the likeness of reality; to use Plato's language, art turns the eye of the soul round to reality. It is to this emotion that we give the name of aesthetic emotion, and the work of art arouses this emotion in proportion as it succeeds in reproducing the forms and arrangements of the world of value.

So much by way of a preliminary statement of my theory. In the second part of this chapter I shall try to fill in the outline of the picture thus rapidly sketched, by an analysis of the distinctive characteristics of works of art of the highest class, and of the experiences involved in the apprehension of such works. I shall begin with an account of aesthetic significance in music, which is the art with which I am best acquainted, and which of all the arts is the purest and the least dependent upon matter.

II. THE SIGNIFICANCE OF MUSIC.

The problem of aesthetics can, I think, be stated very shortly. If you strike at random a dozen separate notes upon the piano, you produce a series of sounds adequately described in terms of physics, and your reaction to them is a series of neural responses adequately described in terms of physiology. Take the same notes and arrange them in such a way that they form the statement of the subject of a Bach fugue, and they can thrill you to ecstasy. Their effect, that is to say, is still a physical effect, but it is no longer merely physical. Yet the difference between the stimuli in the two cases is one which resolves itself simply into a difference of formal arrangement.

[1] Browning, *Fra Lippo Lippi*.

The problem, then, may be stated in this way: why is it that certain arrangements of sounds in music and certain arrangements of lines and colours in pictures are capable of moving us profoundly, while others are not? If we call the arrangements that move us significant, our problem becomes, what is the source of their significance? If we describe their effect upon the audience or the spectator as the evocation of aesthetic emotion, we may ask what is the explanation of the ability to arouse such emotion, or, putting the question in another way, for what exactly is it that aesthetic emotion is felt?

Returning to the listener who is moved aesthetically by the announcement of the subject of a Bach fugue, we may notice two characteristics of his experience which will serve as clues to the nature of aesthetic emotion and of that which evokes it. The experience is meaningless, i.e. it cannot be defined or described in the terms of anything else, and it is also unique.

I cannot indicate more precisely what is meant by calling the experience of significant music meaningless than by quoting from Mr. E. M. Forster's *Howard's End*: [1]

> It will be generally admitted that Beethoven's Fifth Symphony is the most sublime noise that has ever penetrated into the ear of man. All sorts and conditions are satisfied by it. Whether you are like Mrs. Munt, and tap surreptitiously when the tunes come—of course, not so as to disturb the others—or like Helen, who can see heroes and shipwrecks in the music's flood; or like Margaret, who can only see the music; or like Tibby, who is profoundly versed in counterpoint, and holds the full score open on his knee; or like their cousin, Fräulein Mösebach, who remembers all the time that Beethoven is 'echt Deutsch'; or like Fräulein Mösebach's young man, who can remember nothing but Fräulein Mösebach: in any case, the passion of your life becomes more vivid, and you are bound to admit that such a noise is cheap at two shillings.

Note, that while all the characters are listening to the music, and most of them are enjoying it, only Margaret is listening to it in the way proper to music, i.e. deriving from the music a particular kind of pleasurable emotion which could be obtained in no other way, and which is unique in the sense that only an aesthetic object could arouse it. Now Margaret is described as thinking only of the music; she is not, that is to say, thinking of the technical ability of the conductor, or of the personalities of the players, or of what the music may express or signify, or of her own emotions, or her own past, or of life in general; in a word, she is not thinking of what the music *means*, but simply of the music itself. And she thinks of the music itself, and all who listen properly to music are

[1] Forster, *Howard's End*, Chap. V, p. 29.

bound to think of it in this way, for the reason that the music, rightly regarded, does not convey anything other than itself which can be thought about. Music in fact has no meaning, in the sense in which a thing may be said to have meaning which symbolizes or stands for or refers to or is explicable in terms of something other than itself. It is unique and unanalysable, and as such it produces a unique and unanalysable effect. And just because this effect cannot be translated into terms of some other effect, just because the emotion produced by music cannot be likened to or described in terms of some other emotion, I say that music is meaningless, or, rather, that we cannot say what its meaning is, or, indeed, whether it has one at all. As I have already pointed out, definitions and descriptions involve giving an account of a thing in terms of something else; if, therefore, the thing is unique, any such account must of necessity falsify it. By the word meaningless, therefore, all that I intend to convey is that the meaning of music, whatever it is, cannot be defined or described. When the listener thinks, like Margaret, only of the music, I shall say that he is listening 'properly' and that the music is producing its 'proper' effect. Music which produces this effect, I shall call 'significant' music.

The assertion that the emotion aroused by music is unique, and that music is, therefore, meaningless when it is listened to in the proper way, should not be taken to imply that it cannot be listened to in other ways, nor that, when listened to in other ways, it will not produce effects other than its proper effect, which are also pleasurable and are not meaningless in the sense defined. On the contrary all music may be treated representatively; it may be regarded, that is to say, as expressing meaning, conveying information, or communicating some intention on the part of the composer, as standing, in short, for something other than itself; most music is, indeed, incapable of being regarded in any other way. In so far as music performs these functions and permits itself to be so regarded, it ceases to be meaningless and ceases, therefore, to produce its own peculiar and unique effect. There are, in other words, a number of incidental, pleasurable effects any of which may be produced by music but none of which are produced exclusively by music; they are not, that is to say, the unique and peculiar effects of music; they are not what I have called its 'proper' effect. What is more, music which lends itself easily to representative interpretation is rarely the greatest music. The production by music of effects which are of the same kind as those which can be produced in other ways seems in fact to be inimical to the evocation of its proper effect. To regard a piece of music

representatively is to debar oneself from regarding it aesthetically; this is true even of the works of the greatest musicians.

While, however, it is possible to regard all music representatively, and by valuing it for the images and associations it arouses, for the meaning it conveys or for the emotion it may be thought to communicate to treat it as ancillary to something other than itself, it is more difficult to do this when listening to first-rate music than to music which falls below the highest class. It is difficult, for example, when listening to Bach to think of anything at all but the music; and, when we are thinking of nothing but the music, we may be sure that the music is fulfilling its proper function of arousing aesthetic emotion.

With these preliminary remarks I proceed to a consideration of the nature of the music which is capable of producing the effect proper to music; I shall then describe various types of representative music in order that the unique and therefore proper effect of music, which is the evocation of aesthetic emotion, may be distinguished from the other types of pleasurable but non-aesthetic emotion which music also arouses.

1. *The characteristics of significant music.*

Music, I repeat, has no meaning which is explicable or describable in terms of anything else. Furthermore, the emotion which it arouses is not akin to the emotion which we feel for the events and objects of the sensible world, since that for which the emotion is felt does not belong to the sensible world. Hence the 'proper' effect of music cannot be described or accounted for in the language which appertains to the events and objects of the sensible world. If music does not communicate a meaning which we can define or arouse an emotion which we can describe, the laws of its nature and being must be other than the laws of those things which communicate definable meaning and arouse describable emotion, and the criterion by which it is judged must be other than the criterion by which such things are judged.

What account, then, are we to give of significant music, and what is the function that it performs? Music derives its significance from a different world from the world of becoming, in which life evolves and upon which our attention is normally directed. This world I shall provisionally call the world of value or reality. The essential musical process is roughly as follows: a particular phrase is announced which is rich with musical significance, and all that is latent in the phrase, all the significance with which it is pregnant, is then developed according to laws that are intuitively recognized

as right and necessary. The aesthetic value of the music depends upon the significance of the phrase announced and upon the skill with which it is developed; it depends, that is to say, upon the intrinsic character of the original material and upon the use which is made of the material. The intensity and quality of the 'proper' effect which it is capable of producing (as distinct from that which it may in fact produce) is explicable, therefore, entirely in terms of its intrinsic characteristics, and not in terms of the feelings which any person or body of persons may entertain in regard to it or of the experience which they may bring to it. I do not mean by this that the appreciative capacity of the listener is a thing indifferent to the musical effect; it is obvious that people vary enormously in their appreciation of music. What I do mean is that from the very fact that the significance of music is other-worldly and its proper effect unique, the nature and extent of the listener's experience in *matters not related to music* is irrelevant to his appreciation of music.

It is in this respect that music is most sharply distinguished from literature. It is a commonplace that for a full appreciation of a poem or a play some experience of life is necessary; nobody would contend that *King Lear* could mean as much to one who had never suffered, *Hamlet* to one who had never doubted, as they do to mature men and women. Most of Vaughan is unintelligible to a man devoid of religious consciousness, or, if comprehended of the head, a thing indifferent to the heart, while the poetry of Donne is idle bombast to those who have never loved. To the complacent bourgeois untouched by revolutionary fire, Ibsen is a ranter, while Shaw is an amusing mountebank with a penchant for standing on his head. To appreciate the great writers of the world it is necessary that we should have some experience of the things of which they tell us, if only because one of their chief functions is to make our experience intelligible to ourselves. The fact is obvious, and so too is the reason for it; literature deals with the things of this world and arouses feelings which are essentially of the same type as those aroused by life. Very little literature is an expression of pure emotion, none of non-human emotion. Shakespeare's songs, I suppose, come nearer to producing a pure non-human effect than anything else in literature, but even here, as we have already seen, there is a meaningful alloy. The form in literature is always burdened with an intellectual content, and that content mingles with and derives significance from the emotions of life.

But with music it is not so. Our appreciation of music depends

upon our ability to perceive intuitively the rightness and inevitability of certain combinations of sounds, and this ability in no way depends upon experience of life. And since the emotions which we feel for music are different from any of the emotions aroused in us by life, no experience in the emotions of life is required to enrich and enhance our appreciation of music. It is for this reason that the child's appreciation of music may be as keen and as rich as that of the man, although the juvenile taste in literature is notoriously crude.

In asserting that the aesthetic effect of music depends upon our perception of the rightness and inevitability of certain combinations of sound, in identifying, that is, the significance of music with form and arrangement, we are placing it in the same category as chess and mathematics. In these spheres also our success either as originators or appreciators depends upon our ability to recognize intuitively the peculiar virtues of certain combinations, and to perceive the inevitability with which other combinations follow from them. The history of thought bears repeated testimony to the closeness of the connexion between music and mathematics. They had their origins together in the discoveries of Pythagoras, and Plato chooses his metaphors indifferently from either. Leibnitz ascribed our delight in music to 'the pleasure which the human soul experiences from counting without being aware that it is counting', and the motive that attracts men's minds to counting and to the orderly world that counting reveals is the longing to escape from the everyday world with its confusion, its coarseness, and its untidiness, into a world of objective apprehension and disinterested understanding; a world in which, escaping from the fetters of desire, we may participate in a selfless contemplation of the real.

Thus the feelings of the mathematician and the musician are essentially akin. The emotion which the pure mathematician feels for a chain-of mathematical reasoning, culminating in the establishment of a new and more embracing formula, is not other in kind than that which is aroused by the working out of a Bach fugue; it is, that is to say, primarily an aesthetic emotion. The effect of studying mathematics is to leave an impression upon the mind, a worshipping and reverent acknowledgement of something unassailable, a mental joy at the rightness of thoughts coming together to a conclusion, thoughts in just intonation coming together like unaccompanied voices coming to a close. Mathematics gives the same impression of aloofness and coherence as music. Like music it is everlasting and harmonious; like music it is detached and indifferent, and like music it all hangs together. So

much at least I gather from the experiences of mathematicians, although the higher mathematics are, I regret to say, a closed book to me. But I can testify from my own experience to the genuineness of the aesthetic emotion, an emotion aroused by something at once inevitable, necessary and completely satisfying, which I have felt for the chess problems propounded by the late Sam Lewis. The point I wish to emphasize is that these emotions are, if I may use the word in a strict and ethically neutral sense, unworldly; they are not related to any of the emotions aroused by the incidents of life, and they are diminished rather than heightened by fullness and variety of life. It is highly significant in this connexion that chess, mathematics, and music are the only spheres in which we find the infant prodigy. Some have regarded this fact as evidence for reincarnation, holding, as Plato held, that the soul sees and recognizes in a material setting those forms and arrangements which it has already beheld directly in the οὐράνιος τόπος, and inferring that the memory of the young is more vivid, as it is more recent. While agreeing that the peculiar significance of certain combinations is derived from the fact that they reproduce in matter the forms and arrangements of a non-material world, I do not think it is necessary to hold that we have had prior experience of that world in order to account for the uniqueness and intensity of their effect.

I contend rather, following out the suggestion made earlier in the chapter, that our appreciation of these combinations arises from the fact that life is emerging for the first time at a level at which the awareness of the non-material world of value becomes possible. From most of us this awareness is at present withheld; to the musician, however, it is revealed,[1] and by reproducing the forms and arrangements of the world of value in the medium of material sound he enables us to experience at second hand, as it were, something of the emotion which has been aroused in him by the direct vision of the real. But the very fact that the capacity for this apprehension of the forms and patterns of the real is now newly emerging for the first time precludes us from explaining our peculiar feeling for significant combinations of sound in music as arising from recognition; it is analogous rather to a process of discovery. I shall return to this question of the artist as discoverer later, but an incidental reference to the practice of Beethoven may not be out of place here as serving to indicate my meaning. In a letter to Treitsche written in 1811, Beethoven makes the following significant statement, 'Also in my instrumental

[1] See pp. 307, 308 for a necessary qualification here omitted for the sake of brevity.

music I always have the *whole* in my mind.' In writing out a composition, that is to say, Beethoven was merely expanding the implications of a whole already perceived; he was, to resort to a metaphor, resolving a nebula, the themes which emerged during the cooling and crystallization of the unformed mass being less invented than discovered.

My present purpose is, however, less with the artist as discoverer than with the sharp distinction which I wish to draw between music and literature both as regards their natures and their functions. This distinction is obscured by the common practice of ranking music with poetry under the heading of Art, and of making statements about Art in general which purport to apply equally to music and to poetry, as if what was appropriate to the one was appropriate also to the other. This practice is by no means confined to the art critics; Kant and Croce, for example, when writing of aesthetics, draw their illustrations impartially from music and from poetry, without so much as a suspicion that what truly illustrated the character of the one might, for that very reason, be misleading as to the other. Only Schopenhauer appears to have grasped the radical nature of the distinction, and to have realized that the nature, purpose, and criterion of music are different from those of literature in general and of poetry in particular.

In view of the importance of this distinction and the frequency with which it has been overlooked, I must plead indulgence for recapitulating its main heads.[1]

(1) Poetry as a branch of literature may be regarded as the means adopted by the Life Force to give conscious expression to its instinctive purpose. Its success is, therefore, to be measured exclusively in terms of its effects; the criterion of poetry is, that is to say, subjective in the sense that its value depends upon its ability to evoke certain states of mind, and so to effect an alteration in human consciousness.

(2) Music is not experience of life but of the images or copies of the world of reality which life is seeking to comprehend. It is the avenue through which we approach reality, and its value is derived from the reality which it mirrors. Its success, therefore, is to be measured not by a subjective criterion in terms of its ability to arouse emotional states of mind, but by the extent to which it succeeds in reproducing the forms and arrangements of the real.

[1] This summary of the different functions of music and poetry is designed for the sake of clarity to present them in the sharpest contrast. A more comprehensive, and to many a more sympathetic, account of the poet's activities will be found in Chapter IX (see pp. 400–5), where an attempt at reconciliation is made.

(3) The function of literature in general and of poetry in particular being to effect a change in human consciousness, their value is relative to and dependent upon the performance of their function; once the function is performed, the poetry loses its value. Thus the greatness of literature is not objective and eternal but relative and changing. Literature, in short, is an evolutionary tool which ceases to be useful when it has done its work.

(4) Since the value of great music depends upon its ability to reproduce the real, and since the real is changeless, the value of great music is changeless. It is not, therefore, relative to the performance of function nor dependent upon the appreciation of mind.

(5) Life is an active, dynamic force which pulses through the individual monads whom it urges continually forward. The great writer acts as a signpost indicating the direction in which humanity, if it is to evolve, must proceed. Thus the drive of literature is that of a push from behind, and its compelling power is derived from the urge of the dynamic, changing force whose intention it expresses.

(6) Music is not an expression of life but a mirror of reality. The influence which it exerts over us springs from life's premonitory intimations of the real, and our love for it expresses the soul's longing for the goal of its pilgrimage. Thus the pull of music is a pull from in front, a pull which will grow ever stronger as life emerges at levels where the real becomes more perceptible, while the use of literature to indicate direction will diminish as the goal is more clearly seen. But while the pull of music increases its value remains unaffected.

(7) Literature (including poetry) is concerned with life; its function is, speaking broadly, to enhance and enrich our consciousness by enabling us to find the world in which we live at once more vivid and significant; to see in it more beauty and more passion, more scope for our sympathy and interest than we saw before; in a word, it heightens our awareness and deepens our apprehension of life. Because it deals with life, with people, with incidents and ideas, with love and fear and hate, the emotions which literature arouses are of the same type as those aroused by life. They are not, that is to say, unique in the sense that life itself could not have produced them.

(8) The object of music is to reproduce the patterns of the world of value, and the emotion which we feel for it is, therefore, the emotion we feel for value. It is not, that is to say, akin to any of the emotions we feel for life, and is, therefore, unique.

Summing up, we may say that music is to be classed with painting, with mathematics, with religion, and with ethics as one of the windows through which the mind may dimly perceive the nature of the real world. The function of music is not to represent the objects of life or to arouse the emotions which are aroused by life, but simply and solely to achieve significant form. Significant form is form that reproduces the structure of the real world, and it is therefore from this world that the laws of the development of music are derived; it is to its ability to reproduce the patterns and arrangements of reality that the peculiar significance of music is due. Combinations of sound which are significant in the sense defined arouse aesthetic emotion and are called beautiful. The conclusion is that music is unrelated to life, and that the appreciation of it is not dependent upon the experience of life. And this, we may presume, is what Schopenhauer meant when he affirmed that even when the visible and sensible worlds were swept away, music (not the sounds but the patterns) would still remain. Music, said Schopenhauer, is not representational; it does not, that is to say, deal with the representations of the Will's manifestation, but is the direct embodiment of the Will's objectivity. Music is the purest of the arts, purer than painting and purer than sculpture, because the reproduction in sound of the combinations of the real is less distorted by matter than it is in paint or stone. Sound is a less gross material to overlay and to conceal the likeness of the real world.[1] Thus in the appreciation of music we approximate to a pure contemplation undetermined to any specific subject-matter, which is surpassed only by the direct vision of the mystic.

2. *The characteristics of non-significant music.*

If the significance of music is, as I suggest, derived from the real world, the difficulty of giving an adequate account of its nature and function and of the emotion that it arouses is obvious. We cannot make positive statements about the world of being, since language, invented to describe the world of becoming, belongs itself to the world it describes. The difficulty of describing reality extends to reality's likeness, e.g. I feel strongly the inadequacy of the description just given, yet am at a loss for positive material with which to supplement it. Negatively, however, something may be added by a brief account of what may be called the improper effects I have of music and of the means by which they are achieved, in the hope that the unique aesthetic effect may be thrown by contrast into relief.

[1] See for a further elaboration of this distinction pp. 306, 307.

By the 'improper' effects of music I mean certain pleasurable effects which music undoubtedly produces, and produces in most of us most of the time, which are nevertheless other than the unique effect which is peculiar to music, and which I have defined as the emotion we feel for significant form. In contradistinction to the emotion we feel for significant form the pleasurable effects which music is capable of producing, and which I have called its improper effects, are of the same kind as those aroused in us by the objects, passions, and events of the world; they are also of the same kind as those produced by literature. Of these improper effects of music I have already given some account on pp. 285, 286.

Two classes of case arise: there is music which is capable of producing only improper effects, and there are the improper effects of music which is capable of producing proper effects. Both kinds may, however, for convenience be treated together.

(*a*) Our appreciation of music is normally subjective; we import, that is to say, into our hearing of music the emotions that have been aroused in us by life. Treating the forms of music as a means of access to our own emotional world, we refer back the emotion which music arouses to that world. No new experiences accrue, but the old material is stirred. Music to which we listen 'subjectively' is thus used to evoke the emotions of life, or treated as a mould into which we may pour our aspirations and ideals. All music, especially when we do not concentrate upon it intently, is apt to produce a feeling of vague exaltation which in the world is ennobled and transfigured; there comes a glamour upon common things, life seems full of infinite possibilities, and, as we float away upon a sea of sound into the land of day-dream, there seems nothing too great for our achieving, nothing too hard for our enduring. Also we are struck by the indescribable sweetness and importance of our own emotions. The music of Chopin is peculiarly apt to affect people in this way; it creates an atmosphere of wistful melancholy in which we brood sadly but sweetly upon the past, or project the figments of our imaginations into a rose-coloured future. It is *par excellence* the evoker of images; it wafts to us the scent of a lady's hair or handkerchief, brings back the gliding of a boat upon a moonlit lake, or calls up a view of the park from the balcony of a Louis XV drawing-room.

Music is thus treated as a point of departure for trains of romantic feeling or of heroic thoughts. Into its forms is read the infinite variety of human emotions, hate and love, terror and foreboding, hope and aspiration. Thus the imperfect lover brings

to music, and takes away because he brings, the thoughts of his age and the emotions of his past.

Now apart altogether from idiosyncrasy and temperament, the emotions and thoughts of the listener will naturally be coloured by the spirit of his times. His psychological content in a Romantic period will tend to be different from that of the average concert-goer in Classical ages such as the early eighteenth or twentieth centuries. His needs will differ with his approach, and his standards and values will reflect his needs; a generation which has been brought up on Mendelssohn and Chaminade cannot be expected to like Purcell. Thus, while true aesthetic emotion is the same and is changeless in every age, the improper appreciation of music is subject to fashion and changes from one age to another. And musical taste changes just because it is fundamentally ourselves, ourselves with heightened emotions and aims transfigured that we find in music. When music is regarded in this way as an aid to the emotions of life, it is producing what I call its 'improper' effect. This is an effect of the same sort as that produced by literature in general and by poetry in particular. Most music is literary music in that it is capable of producing only this type of effect, and even to music which is capable of producing an aesthetic effect we listen in a literary way for most of our time. The faculty of sustained attention to music is rapidly fatigued; most concerts are far too long, and few of us are able to maintain that concentrated awareness, which is the indispensable condition of the emergence of the proper aesthetic effect, for more than a short period of time. And once we cease to concentrate upon the music itself, the literary effects supervene and we are carried away on the flood-tide of our own emotions.

(*b*) A special case of 'literary' music is that of programme music. A distinction sometimes made between programme music and pure music is that the former arouses emotion while the latter merely embodies forms and patterns. Why we should take the trouble to attend to forms and patterns if they did not move us emotionally is not clear. Aware of this difficulty, some writers have stated the distinction differently and, admitting that pure music like programme music arouses emotion, have proceeded to insist that the emotions involved are in each case essentially of the same kind, the only difference between the feelings produced in us by a Bach fugue and those evoked by Rachmaninoff's famous Prelude being, on this view, one of degree. Both distinctions are, I think, false, the true difference being between emotions which are capable of dramatic expression, these being the emotions we

feel for the tragedy and comedy of life, and the emotions which are caused by the presence of beauty. And, if I am right in my suggestion that beauty belongs to a world of value which is other than the world of becoming, the difference between the two sorts of emotion in question is not one of degree but of kind; they are in fact the emotions which we feel for two different worlds, the world of becoming and the world of being.

In Vernon Lee's words:

> Music presents two sets of psychological phenomena. It can suggest and stimulate feelings akin to those produced by the vicissitudes of real life; and it can interest, fascinate, delight, or weary and displease, by what we can only call the purely musical beauty of its sound patterns. Music thus awakens two different kinds of emotion—a dramatic one referred to its expressiveness, and an aesthetic one connected with the presence or absence of what is known as beauty.[1]

Programme music exhibits this distinction in the clearest possible light, since it differs from literary music in general in that the intention of the music, which is to convey information or to communicate emotion, is in the case of programme music avowed. The usurpation of the function of literature is, in other words, deliberate. A piece of music is composed in order to express a particular meaning, and is given a title to indicate what the meaning is. To convey meaning is, as I have tried to show in the preceding chapter, essentially the function of literature; words are the medium by which meaning is most readily expressed—they have indeed been invented for this purpose—and words are the medium of literature. Sounds may, of course, convey meaning, but the meaning is not so precise as that conveyed by words, with the result that the meaning which music does in fact convey is often quite other than that which the composer intended. For this reason music is vastly inferior to literature as a medium for the expression of meaning, and this is true also of music considered as a vehicle for the communication of a particular emotion. Pieces by modern musicians with descriptive titles are often suggestive of anything rather than of the subjects indicated, and 'Night in the Woods' may be played over the title of 'The Flaxen-haired Girl' without producing any feeling of inappropriateness. The conclusion is that it is only by a misuse of its true function that music is ever employed to express meaning at all, and that to put it to this use is to constrain it to do badly what literature does well. This indeed is instinctively recognized by most critics who

[1] Vernon Lee, *Quarterly Review*, 1906, quoted by Howes, *The Borderland of Music and Psychology*, p. 42.

tend to regard programme music with increasing disfavour as unworthy of serious attention.[1]

What is not so generally recognized is that a considerable body of modern music, though not avowedly programme music, since it lacks a descriptive title, is nevertheless stamped with the hall-mark of the type, being used as the vehicle for the communication of a personal and human emotion. There are indeed many different types of literary music, as many as are the emotions which literature expresses. The distinguishing mark of all the types is an alloy of meaning, the pure form being burdened with an intellectual or emotional content. But whereas in the literary music of the nineteenth century form is sacrificed to drama or anecdote, in the twentieth century it is forgotten in the rapture of personal confession. The most modern type of music has indeed pursued the same course as the most modern type of literature; from being literary it has become psychological. It is music of a highly personal character which expresses and seeks above all things to express the emotional individuality of the composer. Its effect upon the hearer is that of a personal confession; it is as if he were being constrained to listen to the intimate and confidential secrets of a tortured soul. And because the personality revealed to him in the music is at bottom very like his own, its effect is to remind him of his own. Instead of the hearer's attention being focussed outside himself upon forms and combinations which possess objective and independent significance, it is directed inwards and discovers in the music a stimulus to introspection and self-analysis.

That all music is personal in the sense that it springs from the personality of the composer is of course true. Music must of necessity express an individuality and be coloured by a temperament; but, while the personal factor is always present, there is a fundamental difference in object and intention between significant pattern-music and literary or psychological music. The music of Bach expresses the soul of Bach and differs from that of Handel because the man who wrote it was a different man from Handel; but though, in this sense, Bach's music is self-expressive, it was not to achieve self-expression that it was written. Its object is not to convey the personality of the composer by the lyrical expression of his joys and sorrows, his hopes and fears; in intention indeed it has no reference to the hearer at all. It springs from one particular emotion, namely, the emotion which the composer has felt

[1] Cp. Schopenhauer, 'On the Metaphysics of the Beautiful and on Aesthetics', *Selected Essays* (Bell, 1914), p. 291.

for significant form, and, in so far as it reproduces in sound the form apprehended, it evokes the same emotion in the person who 'properly' appreciates it. But the same emotion is evoked not because the composer has wished to communicate something that he himself has felt, but as an incidental result of his success in representing in his music the likeness of the object that he has apprehended. And since the audience feels for the copy[1] the same emotion as that which the composer has felt for the original, we may say that in this sense, but in this sense only, the music has communicated emotion.

Again the music of Bach is stamped with the impress of his personality; yet it also by virtue of the reality which it copies transcends it. If Bach had not apprehended the world of value, and if this discovery had not so profoundly affected him that he set to work to incorporate what he remembered in the medium of sound, his music would not be what it is; in this sense, therefore, his music expresses his personality, but the fact that it does so is only an incident in the production of its 'proper' effect. The composer's sensibility to sound combinations and the music which results from his sensibility are two necessary stages in the evocation of aesthetic emotion in the listener; they are not, however, the objects of that emotion, but merely the windows through which the reality which is in fact its object is apprehended.

(*c*) It should not be necessary to deal further at length with the various forms of subjectivist music and their 'improper' effect. It follows from my thesis that all so-called dramatic music, which uses music as an end to the production of tragic or comic effects, will fail to perform the true function of music or to arouse the emotion proper to music. Opera, for example, is a hybrid form in which music is disabled by the very fact of being mated with words from producing its 'proper' effect. Poetry and music are, as I have tried to show, two distinct activities of the human spirit, pursuing two different ends, and concerned with two different worlds. Poetry assists the progress of evolution by refining human consciousness and sharpening human perception; but though it heightens and broadens the scope of awareness, the objects upon which the awareness so enriched is directed remain those of this world. Music, I maintain, is unrelated to human purpose and indifferent to human emotion; it discloses the objects not of the world of becoming but of the world of being, and provides a foretaste of that full realization of the world of being which it is the

[1] I am speaking loosely here; 'copy' should normally be 'copy of a copy', 'original should be copy'. See p. 307.

object of evolution to attain. Music, in a word, is concerned with ends, poetry with means; in so far, therefore, as music is used, as it is in opera, to enhance an emotion or to intensify an atmosphere, it becomes literary music. Music is neither the slave nor the mate of poetry, nor, when she is constrained to run in double harness, can she do her own work.

A good example of the unfortunate effects of hybridization is afforded by the operas of Wagner. Wagner's music is essentially dramatic, and is devoted to producing certain emotional effects, namely, those appropriate to the events occurring in the opera. That it does in fact produce these effects is, I think, undeniable, but its very success in this direction precludes it from achieving the 'proper' aesthetic effect of music. In order that the mind may experience aesthetic emotion it must be able to concentrate upon the pure form of the music. For this it is necessary that it should be in a receptive condition upon which no alien influences should be permitted to intrude. While the water is troubled, it cannot reflect the sky. But in listening to a Wagner opera the mind is assailed by an infinite diversity of impressions: there is the interest in the plot, the appearance of the actors, the tragic emotions aroused by the sight and description of their misfortunes, and so on, with the result that the harassed and distracted mind is precluded from pure contemplation. Even if the actual quality of the music were such as to achieve significance, it would be impossible for the mind to attend to it. It was, I believe, after listening to Wagner's music that Schopenhauer delivered his famous denunciation of opera, as 'An unmusical invention for the sake of unmusical minds, into which music has to be first impressed by a medium foreign to itself'.[1]

What is true of opera is true also in a lesser degree of songs. In so far as the music is expressive of the meaning of the words, it fails to produce its 'proper' emotion as music; in so far as it is not, the words are an irrelevance and were better omitted. As a general rule the more meaningless the words the more successful the songs; the best are those of the Fa, la, la type. For the same reason Masses and oratorios tend to be superior from the musical point of view to operas, the words used in a Mass being few and conventional, and often consisting of a repetition of 'glorias' and 'alleluias'; thus the music, undisturbed by the meaning of the words to which it is yoked, can develop freely according to the laws of its own nature. Even so, however, the human voice, in so far as it makes articulate sounds, must be regarded as an intrusion,

[1] Schopenhauer, 'On the Metaphysics of the Beautiful and on Aesthetics', *Selected Essays* (Bell, 1914), p. 296.

a fact which was recognized by the early English musicians who used it inarticulately like a musical instrument. The only pure form of music is the instrumental.

It will not be necessary to illustrate my conception of music with further examples, and I turn now to the general theory of art for which this section has prepared the way.

III. THE FUNCTION OF ART.

In the course of the discussions of the two preceding sections I have endeavoured to show, first, that beauty in general is objective and that its existence is independent both of mind and matter, and, secondly, that the significance of music is explicable only on the assumption that music is a manifestation of beauty. The words 'manifestation of beauty' are, of course, metaphorical, and I have endeavoured to give them precision by the suggestion that the sound-patterns of music in some way represent the ordering of the real world; they copy its arrangements. To say that music is a likeness of reality does at least suggest that the significance of music is derived from its peculiar relation to reality, and it follows, therefore, that the peculiar kind of emotion which music arouses, being an emotion felt for reality, is other than any of the emotions produced by the events of this life or by their fictional representations in literature. I have called this emotion aesthetic emotion, and the element in music that arouses it significant form. The significant form of a piece of music is, therefore, the factor in it which reproduces the real or, in other words, that which makes it beautiful. I propose now to include the art of painting in my survey, with a view to outlining a theory of the nature and purpose of art in general which will apply not to music only, but also to painting and sculpture. I shall, however, from time to time make special reference to painting, where incidental differences between its nature and methods, and those of music as already defined, render such reference necessary.

The theory may be stated as follows. The function of a work of art is to arouse aesthetic emotion, and its success in doing this is the criterion by which it is to be judged. Aesthetic emotion is always emotion of the same kind; it may differ in intensity, but not in quality; it is also different in kind from the emotions aroused by literature or by life. Aesthetic emotion may be present with other emotions, and is sometimes aroused with other emotions by works of art. Although, however, it may be experienced in conjunction with other emotions, its distinctiveness is not thereby impaired; it remains unique. The ability of a work of art to arouse

aesthetic emotion is, moreover, usually in inverse ratio to its capacity for arousing other emotions. All works of art are distinguished by the common quality of being able to produce aesthetic emotion; this common quality may be identified with the possession of significant form.

By significant form is meant certain combinations of lines, of lines and colours, of lines and masses, or of sounds. According to the metaphysical theory, with which I am not immediately concerned but which I shall elaborate later, the significance of these combinations is due to the fact that they reproduce or copy the patterns and arrangements of the world of value, with which I identify reality. The function of art is not, therefore, representational in the sense in which a picture may be said to represent life, nor is its success to be judged in terms of its fidelity to life. It is nevertheless a fact that most art is representational and that it is admired for this reason. With the case of representational music I have already dealt under the title of literary music. It is, however, a fact that representational painting is more common even than representational music, and the reason for this fact reveals an important difference between the two arts. Representational painting, like representational music, can arouse emotion and excite admiration. These effects are produced in virtue of what may be called the descriptive power of painting; that is to say, its ability to describe or represent the objects and personages of everyday life in such a way as to arouse emotion or convey information. A picture by Frith, to take an extreme example, is interesting because it makes us speculate upon the fortunes and characters of the personages who are so realistically portrayed. Most post-Renaissance art is of this character, painting being regarded not as a manifestation of pure form but as a method (one among many) of stating a fact or suggesting a situation. Combinations of lines and colour are treated, that is to say, not as things significant in themselves but as the vehicles of an interest which is outside themselves; they are used as a means of conveying emotion; they are not themselves the objects for which emotion is felt. It is for this reason that a representational picture is, in so far as it is representational, not a work of art, since the object of a work of art, on the view here put forward, is to introduce the spectator to another world, not to photograph this one. It is, however, considerably more difficult for the painter to achieve this object, which I have identified with the true function of art, than for the musician, for the reason that painting is in method and point of departure a representational art, in a sense in which music is not. There is

indeed in this respect an important difference between the two arts, a difference which may be described by saying that the painter requires the presence of a natural object or group of objects as a condition of the exercise of his art, while the musician does not. The musician, according to my theory, apprehends[1] directly the character of the real world, and embodies the combinations he has apprehended in forms and patterns of sounds. His music is not, that is to say, music *of* anything; it is just a piece of music. The painter, from the very fact that his picture is a picture of something in the sensible world, is thereby anchored to that world, nor does he ever wholly win free from it. In so far as his pictures cause aesthetic emotion, it is because they embody significant form, form, that is to say, which reproduces reality; but the forms of reality have not been apprehended directly by the painter; he has only discerned their images in nature. It is not, in other words, the form and pattern of reality itself that the painter apprehends, but the copies or representations of it which appear in natural objects.

This statement is ambiguous as it stands and requires amplification. Painting is a more complex art than music in the sense that more ingredients are involved in the production of its effect, and the ingression into it of the real world is, therefore, more difficult to detect. There is the natural object or group of objects, the vision of the artist, the likeness of the forms of reality perceived in the natural object by the vision, the emotion felt by the artist for the forms so perceived, the picture in which he seeks to reproduce the forms, and the aesthetic emotion felt by the spectators on seeing the picture. It is necessary to keep these various ingredients distinct if we are rightly to conceive the processes involved in the production of a beautiful picture.

The painter, like the musician, may be defined as a vital monad in whom life has emerged at a level at which it is capable of perceiving and being moved by significant form. Significant form is the likeness of reality in matter. I use the word likeness not because I think that any piece of matter which belongs to the sensible world, that is to say, to the world of becoming, can really be like anything which belongs to the world of being, but simply for lack of a better word to describe a relation which, it is obvious, we cannot fully comprehend. What I mean is that reality is that which gives the forms of material objects their extraordinary significance, and I call, therefore, the artist's capacity for apprehending form a feeling for reality.

The painter being defined as one who perceives the likeness of

[1] See p. 307 for a qualification of this.

reality in the significant forms of natural objects, and being, therefore, by definition incapable of the direct vision of the real itself, a medium for the manifestation of form will be necessary to set his perceptive faculty working.[1] He must, that is to say, await the appearance of a suitable natural object or situation before it can be brought into play. A suitable object or situation is one in which the forms of the real world are imaged or copied in a material setting. The artist is enabled in virtue of his perceptive faculty to distinguish these forms, and proceeds to reproduce on canvas what he has seen. Since the forms are perceived in the material setting of an object or a situation, the picture will be incidentally a representation of the object or situation. But the intention of the painter is not to represent the object or situation photographically, but to portray only certain aspects of it, and to portray those aspects in such a manner as will exhibit the object or situation as the arrangement of significant forms which he has perceived. The representational element in his picture has, therefore, no bearing upon its artistic value, nor does our recognition of the incidental resemblance between the objects represented and the familiar forms of life provoke aesthetic emotion. That which gives the picture its aesthetic value is the representation not of the object but of the peculiar combinations of significant form which the object embodies. The external world is, therefore—rightly regarded—simply the medium in which pure form is manifested to the artist. The medium, the natural object, acts as a point of departure for his exploration of significant form, and it may well be that some objects perform this function better than others. There is no reason to think that all material objects are in the same degree vehicles for the manifestation of form, or are equally stimulating to the artist's perceptive faculty. What the artist does is to disentangle the form from the matter by which it is overlaid, and to present it stripped of irrelevances as he himself has seen it. Art is, therefore, representational in the sense that to represent form is its object, the representation of the medium in which the likeness of the form is embodied being ancillary to the achievement of that object. In a truer sense than G. F. Watts intended, or achieved, the artist paints 'ideas, not objects'.

To see the object as significant form is to see it as an end and not as a means to practical ends. It is only when it is considered as an end in itself, as something, that is to say, divorced from the purpose of life and unrelated to human needs, that it is capable

[1] Cp. Clive Bell, *Art*, p. 210. I am indebted to Mr. Bell's book for most of the ideas of which I have made use in discussing the significance of pictorial art.

of arousing aesthetic emotion. It is in this way that the artist regards it, and it is in this way that his picture, if it is successful, compels us to regard it. The artist, in other words, is distinguished from ordinary men and women by his capacity for seeing natural objects as ends; he sees a tea-cup not as a receptacle which will perform with greater or less success the function of holding a beverage, but as a combination of pure forms, and presenting it as such, enables us by his presentation to see as an end what we have hitherto regarded only from the utilitarian point of view as a means.

There are thus three stages in the hierarchy of aesthetic vision. There is the musician who apprehends the forms of reality [1] directly, the painter who perceives their likeness in material objects, and the ordinary man who apprehends them in pictures and in music. The ordinary man, in other words, is normally blind to images of the real world in so far as they are represented in nature; he requires the artist to disentangle them from their material setting, and to throw them, as it were, into relief. Thus the function of art is, to use Plato's metaphor again, to turn the eye of the soul round to reality.

A word may be added on the vexed question of the extent to which it is the function of art to express or communicate emotion. So far as music is concerned our answer to the question has already been indicated. The case of painting is, however, again somewhat different. The painter does not only perceive significant form in objects; he feels emotion for that which he perceives. This emotion is, in my view, the emotion which accompanies life's awareness of the likeness of reality, and is the same in kind as that which the musician feels for the sound-combinations which he apprehends; it is what I have called aesthetic emotion. The capacity for feeling this emotion for natural objects constitutes the distinctive feature of the artist; it is his unique and inalienable possession. If no outlet is found, a reservoir of emotion accumulates, so that the artist with nothing to paint grows restless and disquieted. Some factor is required to enable the reservoir to overflow before the artist can begin to paint, and this factor is supplied by the object or situation which he is enabled to see as a combination of forms. In addition to causing the reservoir to overflow and to actualize itself in creation, the object or situation performs a second function by serving to canalize and concentrate it in a certain direction. It constitutes a problem which focusses the artist's energies and brings his perceptive faculties to a point. In so far as he succeeds in representing on canvas the significance of

[1] See, however, p. 307 for a qualification of this.

the combinations of lines and colours which his vision has enabled him to perceive, his picture arouses aesthetic emotion in the spectator. The spectator, therefore, feels for the picture the emotion which the artist has felt for the natural object, and in this sense, and in this sense only, the picture may be said to communicate emotion. I say in this sense only, since it follows from what has been said in Section I that we cannot regard the expression or communication of emotion as the object of the artist, nor are we entitled to see in the success of the picture in communicating emotion a criterion of its value. On the other hand, the experiencing of aesthetic emotion by the artist does seem to be indispensable for its excitation by the picture in the spectator, since it would not otherwise be possible to account for the failure of photographs and accurate copies of old masters to produce it.

A photograph of beautiful, natural scenes of the kind that attract the artist notoriously fails to produce the aesthetic effect either of a picture of the same scenes or of the scenes themselves. Yet it is difficult to see in what respect it differs from a realistic picture. The paintings of the old Flemish masters are particularly significant in this connexion. In appearance you have a faithful portrait in colours of the interior of a room, of a group of people, and of various pieces of furniture. So far as can be seen the interior is presented without distortion, selection, amplification, or omission; the picture bears none of the ordinary characteristics which normally prompt the spectator to say that the painter has transmuted the stuff of matter by passing it through the alchemy of his own artistic imagination. In a word, the picture appears to be an essay in faithful realism; the artist, you would say, has painted just what he saw, just what you see, and just what a camera would see. Yet he has created something which arouses in you an emotion which you would have been far from feeling for the original.

In cases of this kind it seems impossible to explain the peculiar effect of the picture, except on the assumption that the artist has succeeded in communicating to you the aesthetic emotion which he has first experienced in virtue of his capacity to see the original scene as a combination of significant forms. If he had not felt this emotion, he could not have represented the significant element in the group of objects, and the spectator would not then be feeling for the picture something different from what he would have felt for the original.

I venture to suggest the same explanation for the failures of copies or reproductions of great pictures to arouse the aesthetic emotion produced by the picture copied. However exact the copy,

the effect is noticeably less intense. The reason for this difference of effect would appear to lie in a failure to feel aesthetic emotion on the part of the copyist. If the copyist does not feel such emotion for the original picture, the most careful copy will fail to produce aesthetic emotion in the spectator; if he does, he will not be able to make an accurate copy, since he will then be in the position of an original artist who is feeling aesthetic emotion for natural objects; he will not, that is to say, be seeking to make a faithful representation of a natural object (in this case the original picture) in which he perceives significant form, but only to make manifest in his own picture the significant form which has stirred his emotions.

Conclusion.

According to the view which I have endeavoured to put forward, art is the avenue through which lies the soul's approach to reality. Works of art, in so far as they are beautiful, reflect the likeness of the real world, and give us our first intimation of the existence of such a world. Life, I say, has emerged in the artist (I am using the word in its most general sense) at a level at which it becomes for the first time aware of the real. But this is not the normal level of the life of our times; we are most of us still incapable of apprehending the images of the real which appear in natural objects, and we require the artist to make them plain. The world of value is born for us first in art, and the artist is the midwife who brings it to birth.

So far we have spoken of the effect of art upon the spectator. From the point of view of the artist, it may be described as the record of an exploration of reality. The artist apprehends natural objects or sound-patterns as combinations of pure forms, and behind pure form he finds a mysterious significance that thrills to ecstasy. He attains but cannot hold the vision thus revealed, and produces a work of art to give abiding form to the significance he has felt and remembered. A work of art is not a creation: it is the embodied memory of a discovery.

Thrilled by his vision the artist seeks further to explore this mysterious world whose significance has been revealed to him, and by training and discipline advances in the knowledge of it. Earlier in the chapter I summarized Plato's account in the *Symposium* of the stages through which the soul passes on its way to the vision of the Form of beauty. For us, too, there is a ladder of ascending awareness of this real world, and in the light of the previous discussions on music and painting we may construct it somewhat as follows:

(*a*) *Painting*. (i) The first stage is that of representational painting. Art at this stage is essentially imitative; it imitates or represents the natural objects of the physical world, using them as a means of communicating emotion or conveying information.

(ii) The second stage is that of non-representational art, in which natural objects are treated not as means but as ends. They are painted, that is to say, for the sake of the arrangement of lines and colours which they exemplify, this arrangement itself being the object for which emotion is felt. At this stage significant form is perceived by the artist as implicit in nature, and is made explicit in painting, the artist's object being to disentangle the likeness of pure form from the material in which it is manifested. In pursuance of this object he presents only so much of the material as is necessary to exemplify the combinations of form, line, and colour whose significance he has grasped.

(iii) Beyond the apprehension of the likeness of formal beauty in a material setting, there is the vision of beauty itself; but this, the direct apprehension of form, seems to be denied to the painter, since he must from the very nature of his art paint something which is not purely formal but in part material.

(*b*) *Music*. (i) The first stage is exemplified in music as in painting, but it is not so common and it is easier to pass beyond it. In the case of what I have called literary music in general and in programme music in particular, music is treated descriptively. It is used to express meaning; it conveys a particular atmosphere, communicates a particular impression or arouses a particular emotion. The emotion is of the same type as those which we feel for the chances and changes of our everyday life. But because the influence of a perverse representational tradition is not so strong in music, and also because music is exempted by its nature and methods from the necessity of being *of* something, music more readily achieves stage (ii).

(ii) At this stage music is concerned solely with the relations of significant forms. It has no meaning and it conveys no information. Its value lies in the formal significance of the combinations of sound which it achieves. Putting the point epigrammatically we may say that what matters in music is not how it sounds but the way in which it is arranged.

I have said that in stage (ii) the painter perceives the likeness of significant form in natural objects. For the sake of clearness I have also affirmed throughout this chapter that the musician perceives significant form directly and not merely its images or copies in matter. This affirmation it is now time to qualify. That there

are no natural objects for the musician is true, yet from the very fact that his vision takes shape in sound, which is a physical medium, we must deny him, at any rate as a normal experience, that direct awareness of pure form which is the privilege of the mystic. The sound-patterns which he composes are, we must presume, the embodiments of the sound-patterns he has apprehended. But his subject-matter though material is less gross than that of the painter, and the combinations of sound in which he discerns significance are more plastic to beauty's impress than material objects. Sound, that is to say, is more sensitive to catch the likeness of the real world than any other physical medium, and for this reason reproduces its forms and patterns more clearly and with less distortion. There is less overlaying material for the composer to strip away in his revelation of significant form than there is for the artist. I am constrained, therefore, to suggest, although the obscurity of the process of musical inspiration renders a precise account difficult, that the function of the great musician is to discover the formal significance in combinations of sound which he apprehends mentally (as Mozart is said to have thought out in advance the whole of a symphony without scoring or playing a single note), or which he may actually render in a material form (as Beethoven is said to have worked out many of his themes phrase by phrase upon the piano, trying the phrases over experimentally); but that he does not normally attain a direct awareness of the real world itself. Since, however, combinations of sound constitute the closest imitation of the real of which sensuous material is capable, music is for this reason nearer to reality than painting.

(iii) There are, however, indications that the musician can on occasion rise to a higher stage in the apprehension of beauty.

In order that the bearing of the suggestion that I am about to make may be properly understood, I ought at this stage to explain that it will be contended in the final chapters of this book that life has already emerged at a level at which a direct apprehension of the real world is achieved. This direct apprehension in which the nature of the world of being is revealed not in a material medium to the senses, but directly to the mind, is the achievement of the mystic. The mystic contemplates intermittently and uncertainly, it may be, but nevertheless directly, the original of which the painter and the musician apprehend the imperfectly manifested likeness. Because of the superior transparency (so to speak) of sound, the likeness is, as I have tried to show, less distorted in music than it is in painting, and the suggestion that I now put forward is that the degree of distortion may approach a limit at

which the material medium 'defecates to a pure transparency'.[1] Just as the morning mists are dispelled by the rising sun, so the veil of sound upon which the likeness of the real that lies behind is limned may be thinned away and in places altogether dispersed. Rents and gaps will appear through which the world of value is directly visible. Through these rents the musician's vision will penetrate into the real world itself, and, for so long as he remains in contemplation of it, he will share the privilege of the mystic. While the mystic has not needed the material ladder by which the soul ascends out of the sensible world, the greatest musicians have seemed able on occasion to dispense with the rungs of the ladder by which they have mounted.

The suggestion that great musicians have on occasion succeeded in winning through to the direct vision of the mystics is, of course, a pure assumption which I put forward with hesitation. That the assumption is not baseless, certain passages of music, most of which are to be found in their composers' later works, shall be my witnesses. It is these passages that I imagine Schopenhauer to have had in mind when he wrote 'In all true works of art thou wilt discern eternity looking through time, the godlike rendered visible.' There is, for example, a peculiar quality in some of the music of Beethoven's last period, to take the most prominent instance, which seems to point unmistakably to the need for some such explanation as that here advanced. In the Cavatina of the Quartet Opus 130, for instance, or in the slow movement of the ninth symphony, it seems as if the composer had passed into a sphere in which the ordered discipline of music, the laws of harmony, the technique of development, and the forms of sound itself are no longer necessary. Throughout his later period his music has been growing looser in texture; there is a gradual and cumulative abandonment of the ordinary forms and patterns within which most composers have found it necessary to concentrate their inspiration, and an almost contemptuous disdain of most of the graces with which they have sought to adorn their music. It is as if Beethoven, whose life had been one long struggle to strip away the veils of matter that for normal vision wrap round and obscure the form, has finally overcome the last of the barriers which have interposed between him and reality, and breaking the fetters of the material world has emerged into a completely non-sensuous realm. And paradoxically enough it is the very formlessness of his music which is the witness to his victory. For this apparent formlessness, which seems at first sight to express nothing but an impatience of

[1] Coleridge, quoted in Arnold's lectures *On Translating Homer*.

all ordinary restraints, is, rightly interpreted, a proof that he has passed beyond the need of restraints. The barriers which he is, as it were, kicking over are the last vestiges of the material world from which he is escaping. I would refer to one passage in particular, which occurs in the Andante to the Trio Opus 97, in support of an interpretation which will, I fear, seem to many fantastic. The Andante consists of a theme and variations; at the close of the last variation the theme is repeated, but it is never finished. Just as we are expecting the last notes, there is a half-close and then, the theme forgotten, the music seems to float away into a sea of pure sound, formless, meaningless, yet sheerly beautiful. I cite this example because the transition from the ordinary world of musical significance to what I can only call the vision of the pure form is here so abrupt that it is impossible not to be struck by it; but passages of the same kind, although less easily recognizable, occur frequently in the slow movements of Bach and occasionally in the later Mozart.

The suggestion that I am putting forward in explanation of these passages, taken by itself, cannot but appear fantastic; yet it follows naturally enough from the general theory outlined in this chapter. For what I am saying amounts to the assertion that in stage (iii) the musician does for a fleeting moment break through into the world of reality itself, and that he is, for so long as the vision lasts, in direct contemplation of beauty. In a word, he has passed beyond the confines of art and entered the realm of the mystic. Unable to retain the vision, he seeks to embody it in sensuous form in order that he may be able to refresh his memory with its material representation; and, being a musician accustomed to express his sense of form in sound, he naturally resorts to sound even when the object which he seeks to represent is no longer apprehended as a combination in sound. Sound in fact is constrained to be the medium of a vision which it is no longer fitted to carry; strained to bursting-point it breaks down under the strain. It is for this reason, because the music strives to represent not beauty's likeness, which is significant form as apprehended in sound, but beauty herself, that the work of Beethoven's last period seems to us formless and inchoate, transcending all ordinary restraint and deriving none of its significance from the formal elements wherein aesthetic value normally resides. It is a representation of the real which owes nothing but its bare existence to the sensible world. 'Nothing', wrote Beethoven, 'can be more sublime than to draw nearer to Godhead than other men, and to diffuse here on earth these Godlike rays among mortals.'

CHAPTER VII

ETHICS AS THE AWARENESS OF GOODNESS

INTRODUCTORY.

I HAVE tried in the last chapter to demonstrate the inadequacy of the many subjectivist explanations of aesthetic experience, deducing therefrom the necessity of assigning an objective status to beauty. Beauty, I have urged, is neither a characteristic of our feeling for works of art, nor a relation between knowing mind and object apprehended, nor a concept of thought, but an element of value, a real and objective factor in the universe, the apprehension of which, or rather of its representations in music and painting, is or gives rise to aesthetic emotion. I have also suggested that such apprehension is a comparatively late emergent in the evolution of life, so that it is only during the last few thousand years that the perception by life of the likeness in sensible objects of the beauty which belongs to the world of value, has begun to be possible. The further advance of life is, I have hazarded, one in which the apprehension of beauty will be achieved continuously and directly, and enjoyed by living creatures as a whole, instead of being, as it is at present, the precarious privilege of the evolutionary 'sports' whom we call artists.

I have now to apply a similar treatment to ethics. Following my interpretation of aesthetic emotion, I shall argue that the attempts to explain our feeling for goodness on materialist or subjectivist lines palpably break down; that the theories which endeavour to resolve goodness into something other than goodness, as, for example, happiness, fail to take into account the unique character of moral experience, and that such experience can only be adequately interpreted on the assumption that goodness, like beauty, is a member of a world of reals, an element of value, which is at once unique and unanalysable; that as such it is apprehended by mind, of which it is independent, when the latter has emerged at the appropriate level; and that so-called moral or ethical experience is the name which we give to such apprehension and to the feelings which it engenders. But just as the beauty of a work of art is not the objective beauty of the real world, but merely the imitation or representation of the beauty which the artist in virtue of his fleeting vision of the likeness of the real remembers and embodies in music or painting, so is the ethical value of a good act derived not from the participation of the act in goodness itself,

or from any intrusion of the world of being into the world of becoming, but from the fact that it, too, imitates or reproduces some aspect of the real world. And just as there are in the aesthetic sphere different levels of apprehension, namely, that of the artist who perceives the likeness of beauty in the sensible world and that of the ordinary man who perceives only the copy of the likeness that the artist has made, so in the realm of ethics are there two forms of apprehension of goodness, that of the original moralist as seer, in whom life has emerged at a level at which the good which is a factor or element in the real world is directly though intermittently perceptible, and that of the ordinary man, who realizes the ethical value of and owns the moral obligation to perform those actions which the moralist, seer, or prophet originally pronounced to be good because he recognized in them the closest approximations to the goodness revealed to him in his direct vision which the world of becoming contained. But whereas there are three stages in aesthetic apprehension, there are only two in the apprehension of goodness. The moral genius, in other words, is one who perceives the real world directly, whereas the artistic genius, with rare exceptions, perceives, as we have seen, only its likeness in the world of sense. And the feeling of the ordinary man for the good action, when it is ethical feeling at all and not, as it usually is, a blend of fear, tradition, and prudence, is a feeling for a first-hand copy of the original, whereas his feeling for a picture is for the copy of a copy. Each, however, is a feeling for value, and, since the source of value lies not in the world of becoming but in that of being, the moral apprehension is no more adequately explained than the aesthetic in terms of the emotions we feel for the objects and events of this world.

It will be part of my thesis to show that the evolution of life is a movement which proceeds by the successive emergence of higher levels of itself, from the awareness of the material objects and events which belong to the world of becoming, to an awareness of those elements of value which are already dimly apprehended as belonging to the world of being. This general thesis will be worked out in the two final chapters; for the present our concern is to show the invalidity of the attempts which have been made to explain our sense of moral obligation, which resolves itself on analysis into our feeling for goodness, otherwise than on the assumption that goodness is a unique, independent, and unanalysable concept. This assumption is not a rare one; it is indeed much more common than the equivalent assumption in regard to beauty. So true is this that the theories of most writers on ethics

with whose works I am acquainted appear to be based upon the assumption of the unique character of goodness or The Good. By the word 'unique' these writers mean, I think, to imply among other things that goodness cannot be analysed into or described in terms of anything other than itself, that it can be and is desired for its own sake and not for the sake of some other thing which is not goodness, and that the apprehension of or desire for goodness is a distinct and specific character of our mental states. By asserting, however, that the state of mind constituted by the apprehension of goodness, or that the state of emotion aroused by the desire for goodness, is distinguished by a specific and unique property, they do not, I think, necessarily mean that this property is the same as the specific property of goodness itself. They have also believed that man is free to desire goodness, and to act in accordance with his desire, that is to say, they have held in some form or other the doctrine of free will.

Now it seems to me that, although most ethical philosophers have proceeded upon this assumption and entertained this belief, it is very questionable indeed whether the theories which they have constructed with a view to justifying the assumption and supporting the belief do in fact issue in the conclusions they desire. On the contrary, I think that most ethical theories not only have the effect of disavowing the uniqueness of goodness, but also deprive human conduct of those elements of ethical value with which their authors wish to invest it by implicitly denying our freedom to pursue or to reject goodness.

As I subscribe to their assumption with regard to goodness and share their belief in the freedom of will, I propose to point out the respects in which it seems to me that most ethical theories implicitly deny the assumption or contradict the belief, and then to indicate the requirements which a theory which does neither of these things must satisfy.

I. UTILITARIAN THEORIES.

In the first place all theories of the Utilitarian type which define right conduct in terms of its consequences or results would appear to involve a denial of the unique character of goodness.

It is good to do what is right, and we should desire what is good; but if to do what is right is to act in such a way as, for example, will promote the greatest happiness of the greatest number, and if we are urged to act rightly because right actions have this result, then right actions are performed not for their own sakes but for the sake of their consequences, the implication being that what is

good, namely acting rightly, is desired not for itself but for the sake of something else, namely, the greatest happiness of the greatest number. But if good is desired not for its own sake but for the sake of the results which attend its performance, the unique significance of the concept is destroyed. To say that to do good promotes happiness, and that we ought, therefore, to do good, is merely a roundabout way of saying that we ought to promote happiness, the introduction of the concept 'good' being superfluous. To say that it is right to promote happiness because happiness is good or is The Good does not mend matters. We all of us know what we mean by happiness, even if we are unable to define it, and it is quite certain that we do not mean by it what those who have contended for the uniqueness of The Good have intended to convey by the word 'good'. Happiness may be good, or it may be a part of The Good, but to identify happiness with goodness is to deny to the latter the possession of any special significance in its own right.

Any theory which asserts that we ought to act rightly, or to do good because of the results of such actions, whether these results are implied or expressed, is similarly destructive of the uniqueness of the content and meaning of the word 'good'. Moral maxims of the 'honesty is the best policy' type, by implying that a sufficient cause for acting honestly is not to be found in honesty itself, deny that the recognition of a course of action as good can in itself be an adequate incentive to pursue that course of action. It may be true that good actions do on the whole bring advantages in the shape of pleasure, profit, and social consideration, but to say that we should perform them for this reason is merely a confused way of asserting that pleasure, profit, and social consideration are desirable.

Most religious systems which imply or affirm that God loves a good man, and that we ought, therefore, to do good because it is pleasing to God, issue in the same conclusion. It is difficult, if not impossible, to dissociate the notion that to do good is to act in accordance with God's will from the imagined consequences of obeying or disobeying that will. All religions have taken care to paint those consequences in very vivid colours, the result being to transfer to the next world the incentive to goodness which the statement 'honesty is the best policy' supplies for this one. Morality in either event becomes a kind of insurance; the premiums are paid in the form of diligence, unselfishness, and self-control in the present, and the policy is drawn in the shape of short-term payments in human approval and worldly advancement or long-term payments in divine favour and eternal bliss.

It may, of course, be true that the incentive to do what is pleasing to God is at once more compelling and more admirable than the incentive to do good because it is good; but it cannot, I think, be denied that the two incentives are different, and that to act on any occasion from the one is not only not the same as but precludes the possibility of acting from the other. In other words, good actions which are performed for the sake of winning divine approval no more spring from the motive to do good for its own sake because it is good, than good actions which are performed for the sake of promoting happiness.

I conclude, therefore, that to say that we do what is good or desire the good for the sake of its consequences implies a denial of the conception of the good as something unique which is desirable in itself. The good of the Utilitarians appeals to man's prudence but not to his moral sense.

II. NATURALISTIC THEORIES.

Another group of ethical theories interprets ethical actions not in terms of their results but in terms of their causes.

They are in the main naturalistic theories of the kind which trace the origin of the moral sense to the sentiments of primitive tribes, and then proceed to argue that the moral sense is not in essence different now. Savages fear natural forces, personify them into deities, and then propitiate them. Propitiation means winning for the tribe the favour of the deities propitiated; it therefore secures the approval of the tribe. Thus to act virtuously is to act socially, that is, to act in a way of which other people approve. In the course of subsequent generations the desire to act socially, that is, in a manner which produces advantageous results for the community, appears in its members as a form of inherited instinct or intuition. This instinct which has its origin in fear and its *raison d'être* in the preservation of the individual and the community develops into the moral sense. It calls things moral because it approves of them; it does not approve of them because they are moral.

Explanations of this sort appear to me to rest upon the assumption that to demonstrate that X once arose out of or began as Y is tantamount to saying that X must be radically the same as Y is now. I can see no ground for this assumption. To explain things by their roots rather than by their fruits may give useful results in some spheres, e.g. anthropology, but it does not follow that it is equally applicable to all. In any event, the proof that the moral sense, despite its apparent assurance of objective reference, is

merely a communal rationalization of tribal fears, not only destroys its pretensions to give us information about the nature of the good, but robs the good which it professes to desire of all objective validity. Nor, I take it, is this a conclusion which the supporters of theories of this type would be at pains to deny.

There is, however, a more subtle form of this view, which instead of tracing the origin of morality to savage needs and primitive customs, locates the source of our actions within the springs of our own natures, and then proceeds to regard moral conduct as merely the expression of the way in which our natures react to certain situations. This view destroys the unique significance of morality none the less surely because less discernibly.

The kind of theory I have in mind is that of self-determinism in some one or other of its numerous forms. It may be stated briefly as follows: A man does good acts (1) because he is that sort of man, or in other words because he has a good character. He has formed that character by doing good acts (2) in the past. The good acts (2) done in the past were expressions of the kind of good character that he then possessed. That good character was the outcome of the good acts (3) that went to form it. Thus we can push analysis ever farther and farther back until we arrive at the first actions performed by the individual as a conscious being. These were the inevitable outcome of the character or potentiality for character he possessed at birth acted upon by and reacting to its environment. Neither for character at birth nor for initial environment is the individual responsible; he is not, therefore, responsible for the good acts they condition, nor for the good character formed by them, nor for the good acts that spring from that character. In other words, the individual is not responsible at any point in the character-acts-character series, and his acts are not, therefore, free. They merely and inevitably reflect his character at the moment, and are determined by causes which, though located within the individual himself, are nevertheless other than themselves. But if our good actions are caused and are not free, they cannot be good in the sense in which the word 'good' is used by those who believe in the unique significance of goodness, since this belief, as I pointed out above, carries with it and implies the further belief in the freedom of the will. Among the numerous forms of self-determinism are to be included most of the theories popular among modern psychologists as to the genesis of thought and desire, whether they are psycho-analytic in type and attribute the workings of consciousness to the influence of hidden determining factors in the unconscious, or approximate in tendency to Behaviourism and

interpret the causation of actions in terms of physiological responses to external stimuli. Any activity which is caused, in the sense of being the necessary outcome of a desire which is generated by some prior event in the individual's biography, whether psychological or physiological, of which he is unconscious, is thereby divested of that element of spontaneity which is the indispensable condition of its being made the subject of moral valuation.

In an exceedingly interesting article in *Contemporary British Philosophy*, vol. ii, Professor A. E. Taylor exposes in the clearest way the deterministic implications of this type of theory. He sums up these implications somewhat as follows: If we hold that our actions and desires merely exhibit conformity to a rule expressive of the way in which our characters react to typical features of their environment, or if, though my choices appear to be free, we believe that 'there is a formula which adequately describes my own personal moral character, and that knowledge of this formula would make it possible to calculate the line of action I shall take in a difficult situation, exactly as the astronomer calculates an eclipse or a transit of Venus',[1] then we are implicitly denying the doctrine of the freedom of the will, in the sense in which those who believe in the cause of morality wish to assert it. Professor Taylor proceeds to show how widespread is this view, or some variant of it, among philosophers, detecting in the works of F. H. Bradley, of T. H. Green, and in other unexpected quarters a tendency to flirt with the self-determinism which interprets our choices in terms of automatically predisposing desires.[2] He then lays down the minimum requirements which any theory which seeks to vindicate the freedom of the will must satisfy. The account given by St. Thomas Aquinas, which he summarizes as follows, seems to him to go to the root of the matter.

> When I am 'deliberating' between *A* and *B*, that is, while I am still making the comparison of their respective goodnesses on which my act of taking the one and refusing the other will ensue, my will is [in St. Thomas's words] 'indetermined to either alternative'. When the comparison is over and the estimate '*A* is better than *B*' passed, this indetermination ceases; my will is *now* determined. . . . I am determined to take *A* and leave *B*, and what I am determined by is this judgment of relative worth. In other words, what is demanded as a minimum condition of moral accountability is that I shall be able to make an *impartial* estimate, correct or otherwise, of the two relative values.[3]

The significance of the word 'impartial' is freedom from the determining influence of old habit, unconscious bias, or idiosyncrasy of

[1] A. E. Taylor, 'The Freedom of Man', *Contemporary British Philosophy*, vol. ii, p. 277. [2] Ibid., pp. 277–9. [3] Ibid., p. 283.

character. It is not suggested that the elimination of hereditary bias or unconscious desire is easy or is frequently achieved; all that is contended is that such elimination is possible, that, if achieved, it does result in an impartial comparative judgement of goods, and that the resultant choice of one of them is rational and free.

Professor Taylor's argument then proceeds as follows. The apprehension of a course of action as good carries with it an inclination to follow it, this inclination being nothing less than a desire for the good as such, which constitutes a sufficient motive for the performance of the action recognized to be good. In Sidgwick's words, 'the perception or judgment that an act is *per se* the right and reasonable act to be done is an adequate *motive* to perform it'.[1] And if it be asked why the perception that an action is good is an adequate motive to perform it, the answer is that a man, just because he is a man and not an animal, has after all a natural instinctive bias, a bias which in Professor Taylor's words is the standing '"bias", *ceteris paribus*, in favour of what he judges to be *per se*, apart from all incidental personal relishes and distastes, the reasonable thing'.[2] Reid and Kant held the view that man ordinarily prefers to do what he believes to be right unless he has a strong inducement to act otherwise, and that when he does what he believes to be right, he is acting freely. In other words, the apprehension of a thing as reasonable begets, or rather necessarily implies, the desire for that thing because it is reasonable.

Thus, so far from regarding reason as performing always the function of the handmaid of desire according to the modern psychological fashion, we are back on the Aristotelean doctrine of the capacity of thought itself to motivate action. Our apprehension of good inspires an appetition for the good which we have rationally apprehended, and unless we admit the possibility of this rational apprehension inspiring a desire for the good apprehended, from which, indeed, it cannot be logically divorced, we are giving up the freedom of the will. This, in brief, is Professor Taylor's view.

The question to which this doctrine naturally gives rise is, 'How far is the inclination to do what is recognized to be *per se* right and reasonable necessitated?' At first sight the answer appears to be that it is not in any sense necessitated, since we are told by Professor Taylor, that when there are strong inducements to the contrary we need not, and in fact do not, always act rightly.[3] Moreover, we are referred to Leibnitz's phrase that motives to choose one specific good rather than another 'incline without

[1] Quoted, ibid., p. 285. [2] Ibid., p. 287. [3] Ibid., p. 283.

necessitating'.[1] But the question is not so easily disposed of as this answer would seem to suggest.

That the view of a thing as right necessitates *some* inclination to do it is clear. Professor Taylor quotes, for instance, with approval Price's dictum that 'an affection or inclination to rectitude cannot be separated from the view of it'.[2] When, moreover, the appetition is not of some particular good on some particular occasion but of the good in general, then it appears to be completely necessitated in the sense that no contrary general appetition can stand against it. If, that is to say, we mean by the good a general concept of the kind which is implied in the phrase, 'We needs must love the highest when we see it', then, says Professor Taylor, we may agree with Plato that 'he who sees the good *will* pursue it'.[3] This kind of necessitation being absolute in the sense that it does not carry with it the freedom to refuse assent is not, we are told, specifically moral. But apprehension of this or that particular object which is recognized as being one's own proper good is not necessitated in the same way. 'I cannot help', to quote Professor Taylor again, 'desiring my own felicity; I can help identifying my felicity with, e.g. sensual ease or unlimited material wealth.' Finally, as an example of complete necessitation, we are referred to the apprehension of a logical conclusion validly inferred from self-evident premises; of such an apprehension we may say that it is necessitated because it is itself self-evident, whereas the judgment 'this is good' or 'this is better than that' never has complete self-evidence, and is never, therefore, completely necessitated.[4]

Now I cannot help feeling that there is a difficulty here. We have, it seems, a naturally necessitated inclination to perform what we conceive to be right actions, or, in other words, to desire the good. This necessitation is not absolute; it does not, for example, necessitate to action when there are strong inducements to adopt another course. But we must, I think, conclude, if the use of the word necessitation is to have any justification, that in the absence of such contrary inducements, what is conceived as right or good really does determine us to pursue it. Men are, in other words—so much, at least, Professor Taylor seems to assert—determined by the good, particular as well as general, *in the absence of inducements to the contrary*, just because they are men.

But what account are we to give of the inducements to the

[1] A. E. Taylor, 'The Freedom of Man', *Contemporary British Philosophy*, vol. ii, p. 295.
[2] Richard Price, *Review of the Principal Questions of Morals*, Chap. 8. Quoted, ibid., p. 286. [3] Ibid., p. 295. [4] Ibid., p. 295.

contrary, of those considerations, in other words, in virtue of which we can resist determination by the good? The answer which Professor Taylor gives, and it seems to me to be the only possible answer, is that we can and do act from motiveless impulse. Some acts are for him impulsive in the sense in which 'we cannot speak of either will or freedom in connexion' with them. 'The business of developing character is a process of escaping from domination' by impulses.[1] Thus in addition to willed actions which are free we have actions on impulse which are not.

Expanding this statement in terms of the preceding analysis, we get the following result: actions are determined or necessitated by our rational appetition of the good, except when our inclination to do them is set aside by motiveless impulse. We may say that they are free just in so far as they are not, like the intellectual assent to a conclusion validly inferred from self-evident premises, completely necessitated, but may be so set aside, and our freedom presumably consists in our ability to perform them, although they might have been set aside. If, however, no impulse does supervene, then our necessitation by the good is complete, in which case, as we are specifically told, we cannot call the actions resulting therefrom free, since we cannot do otherwise than perform them. If we argue on self-determinist lines, what we call 'choosing' resolves itself, as Professor Taylor rightly contends, into discovering that no choice is left to us. But the same remark might, it appears to me, be made about Professor Taylor's necessitation by the good in a case in which there is no contrary impulse. If, on the other hand, motiveless impulse *does* set aside our inclination to pursue the good, it appears that we are again precluded from ascribing the word 'free' to the actions which proceed from such an impulse. We are not free, therefore, if we are obliged to act upon our rational appetition of the good in the absence of contrary impulse; and we are not free in the event of an impulse arising to deflect or override our rational appetition of the good.

If it be objected that our freedom consists in our ability to repress the impulse when present, and as a consequence of such repression to act in accordance with our rational appetition, the answer appears to be that this ability depends upon and is conditioned by the strength of the impulse for which *ex hypothesi* we are not responsible.

It may be said that our freedom from complete necessitation by the good lies in the fact that we do not always recognize it or succeed in distinguishing it from the bad, and certainly it must

[1] Ibid., p. 282.

be admitted that we continually act wrongly because we do not know what is right. But for ignorance of what the good is as opposed to the refusal to pursue it when detected it would scarcely appear that we can be held responsible, nor, as far as I know, do those who hold Professor Taylor's view claim that we can. Again we sometimes do wrong because we are neither necessitated by the good on the one hand nor deflected from it by motiveless impulse on the other, but simply because we desire what is bad. But nobody, as has been admitted, desires to perform wrong actions *per se*. Therefore, if we do act wrongly because we desire what is bad, it must be because we are constrained by our bad characters, inherited bias, or hidden desires.

I conclude, therefore, (i) That if our actions are determined by our characters in such a way that even right actions are merely expressions of our automatic reactions to given situations, or are interpretable in terms of our inherited tendencies, we are not free.

(ii) That the endeavour to preserve our freedom by seeking to ascribe the causation of a good action to our necessitation by a rational appetition of the good, except when we are deflected by irresponsible impulse, does not establish the conclusion desired, since, whether we are necessitated by the appetition of the good or by the impulse, we are in either event necessitated.

(iii) That as a consequence good actions to which we can assign any cause, or interpret in terms of any formula, are not really meritorious just because they are not really free.

III. THE INTUITIVE APPREHENSION OF GOODNESS.

I have tried to show in the two preceding sections, first, that actions which are done for the sake of their results are not meritorious, and secondly, that actions to which we can assign a cause, whether rational or impulsive, are not free.

It seems to follow that a good action, if it is to be really meritorious in the sense of the word for which those who believe in the unique, unanalysable character of the good wish to contend, must be one which has neither causes nor results. It must, in other words, be outside the cause-and-effect sequence which normally regulates our actions, whether that cause-and-effect sequence be interpreted in terms of response to stimulus as by the behaviourist and physiologist, or in accordance with the psychological causation of the psycho-analyst. The apprehension of goodness and the desire to do good are, therefore, both arbitrary in the sense that no rational account can be given of either.

A rational account of goodness could only be given in terms of

its results or its causes. To give reasons why we should be good would imply that we should be good because of the potency of the reasons we have advanced, or, in other words, because of something other than goodness. In the majority of cases, this something other than goodness which is advanced as a reason why we should be good finds expression in terms of the results or consequences of good actions; reasons given for being good are that it pays, that it will make us happy, or that God or other people like it.

If it does not explain by results, a rational account of goodness must take the form of citing its conditions, predetermining factors or causes, of showing, for example, how it came about that a certain person possessed a good character, or acted rightly on a particular occasion. Such an account, by inserting both the apprehension of and the desire for goodness into the cause-and-effect sequence of our biography, does in fact destroy the spontaneous or voluntary character of the acts which spring from such apprehension and desire, and in so doing deprives them of ethical value.

But if no rational account can be given of goodness, if goodness is in essence non-rational, it follows that it is not possible to defend goodness to a moral sceptic, or to persuade a man who feels no inclination to goodness to be good, or to want to be good, by advancing reasons why he should pursue goodness. This conclusion seems to be convincingly borne out by the experience of those who have engaged in preaching or moral exhortation. Nothing, indeed, is more remarkable in ethics than the failure of the method of direct moral exhortation to produce effective results. For two thousand years teachers and preachers have striven by inculcating the principles and precepts of Christianity to mould men's characters and to improve their conduct; yet we still have our prisons, our judges, and our wars, and it remains to-day, as it has done for two thousand years past, an arguable question whether men are better or worse than they were before Christianity was introduced.

This is not to say that men are never responsive to what is called ethical teaching. They may be and are so profoundly affected by it, that their whole lives are revolutionized; but, if our previous arguments be valid, the teaching in question is only by courtesy called ethical; it reveals itself, that is to say, on examination as based not on a disinterested appeal to do good because it is good, but upon the kind of considerations that we have termed utilitarian or naturalistic. Men may be persuaded to act rightly by a demonstration of the pleasurable or advantageous results which will attend such a course, or they may be dissuaded from acting

wrongly by depicting in lurid colours the severity of their probable punishment. Exhortation of this type, which appeals to men's prudence or plays upon their fears, is often effective, but we cannot for the reasons given regard it as ethical.

It is, I think, clear that most religious appeals have been of this character. They have allured men into good by the promise of heaven, or deterred them from evil by the threat of hell; their appeal has been addressed to man's prudence rather than to his conscience. Ethical teaching of the kind which the social sense of the community as embodied in law and public opinion brings to bear upon its citizens from birth upwards, derives its authority from tradition and its content from history; do this, it says, if you wish to obtain the approval of reputable persons; refrain from that, if you wish to avoid the censure of society. 'This' is not directly conducive to any social good any more than 'that' is productive of social harm; but the former is hallowed, the latter proscribed, by the experience of the past, which has become crystallized in customary observance.

In so far, then, as so-called ethical teaching is effective, it is effective for non-ethical reasons. Direct moral exhortation, the bare injunction to do good because it is good, fails for the simple reason that to those who lack the experience of good upon which it is based, it is meaningless. Moral exhortation is based upon a conviction that certain things are good and others bad, a conviction born of a direct insight into the nature of the good. In so far as it is addressed to those who do not share the conviction, it is fruitless; in so far as it reaches those who do, it is superfluous. We cannot convey the sense of the beauty of a piece of music to a deaf man, or explain the point of a joke to a dull one; for the same reason it is impossible to convince one who has no direct experience of the good, that certain things ought and others ought not to be done.

At the present level of evolution the direct awareness of good in which moral experience consists, is as uncertain and intermittent as the apprehension of beauty. It is possible that some people are entirely without it. In any event it is neither clear nor conclusive enough to afford in itself an adequate basis for right conduct. It is for this reason that Plato made the knowledge of the good the prerogative of a few philosophers, prescribing for the many the holding of correct opinions in virtue of which they acted rightly, without knowing why what they did was right or even that it was so. The morality of the multitude was based, that is to say, not on the individual's apprehension of good, but on his respect for social regulations. It was the duty of the guardians who had

apprehended the form of the good to frame laws of such a kind that by the mere process of obeying them, the many attained to such goodness as was appropriate to their nature and relative to their capacity. Utilitarian and naturalistic inducements were invoked to ensure the unwitting performance by the many of those actions whose rightness had been perceived by the guardians in virtue of their training and insight. Plato, in short, maintained the intuitional apprehension of the good, while recognizing the inefficacy of teaching based on an appeal to its compelling power when addressed to those who had not attained to it.

In this he was but carrying out the lessons of experience. Let us suppose that we are endeavouring to persuade a man to act in a way which we intuitively perceive to be right. We bring forward, in the first instance, arguments in support of the course advocated based on utilitarian considerations: 'Do this', we say, 'if you wish to prosper', 'Do this, because so and so will expect it', or 'Do this if you don't want to be thought a blackguard'; thus by appeals addressed to his prudence or his fear, we seek to persuade him to the right course. Let us suppose further that these appeals fail, and fail because he attaches a different weight to the considerations brought forward from that which we have been inclined to place upon them, that, in short, he takes a different view of his interests and of what is best calculated to advance them. We are thrown back on our last line of attack; we bring up our ethical reserves. 'Do this', we say, 'because it is the only decent thing to do. Do it because it is right.' If this appeal, too, proves fruitless, what more can we say? Our plea may of course be rejected on the ground that, although it is agreed that what we advocate ought to be done, the sacrifice involved is greater than our friend finds himself able to make. In this case the difference between us is not primarily an ethical one, and does not, therefore, affect the issue I wish to raise. But let us suppose that our friend simply fails to recognize the moral obligation that we seek to invoke; that he does not share our view that the action indicated is the only decent thing to do, that he does not, in other words, feel that the contrary action is wrong. We can bring no further argument in support of our contention; we can appeal only to an ultimate and unanalysable intuition, and, since it is an intuition which *ex hypothesi* he does not share, the appeal falls on deaf ears. If he does not see that the action in question ought to be performed, we can only abandon the hope of influencing him in the regretful conviction that our friend lacks a moral sense.

All arguments about the rightness or wrongness of particular

actions, when they are not based upon purely utilitarian considerations, reach sooner or later this *impasse*. Even Plato comes to it in the *Republic*, when asked to prove the superiority of justice to injustice. Faced by Glaucon's challenge he constructs his Ideal State, but he is the first to see that he has not provided the proof required.

This, says he in effect, is my answer. I have shown you the principle of justice clearly and unmistakably. Justice is present and operates effectively in all the regulations of my city; nowhere will an example of injustice be found. Do you not feel that the life of such a city guided by such a principle is better than the life of injustice which Thrasymachus praised? If you do not, I can argue no further. I can only say that your inability to prefer the just to the unjust argues you lacking in moral sense. Since, moreover, the moral sense is a natural and inevitable part of man's endowment, as essentially a part of human nature as the reason or the passions, you are in respect of your deficiency not completely a man.

Thus to deny the possession of a moral sense to one who fails to exhibit the perception of moral value is to assert that he lacks that experience of the good which, however intermittently and uncertainly, most men do have, just because they are men. 'Your honesty must be based, as the sun is, in vacant heaven; poised, as the lights in the firmament, which have rule over the day and over the night. If you ask why you are to be honest—you are, in the question itself, dishonoured. "Because you are a man" is the only answer.'[1]

A man lacking in moral sense does not know that this is better than that, because he does not know what good is. Thus all ethical judgement, whether general or particular, reveals itself on analysis as founded on moral experience; moral experience, that is to say, which consists in a unique, unanalysable, and incommunicable apprehension of the good.

My conclusion is that goodness, both in the apprehension and in the desire of it, is a purely private and personal thing; as private and personal as, for example, the toothache of which it is impossible to give an account to a person who has not experienced it. This is not to deny the uniqueness of the experience of goodness, but rather by insisting on its uniqueness to assign it to the category of those private intimations which are peculiarly ours in the sense that we are unable to defend, to describe, or to communicate them. Like the apprehension of beauty, it is direct, intuitional, and non-rational, partaking in its nature, though in an elementary degree, of the direct intuitional experience of the mystic.

[1] Ruskin, *Time and Tide*, § 33.

CHAPTER VIII

VITALISM AND TELEOLOGY

INTRODUCTORY.

THE conclusions arrived at in the last two chapters demand the inclusion in our metaphysical system of an element which is other than life, other, that is, than life conceived as a dynamic force, a changing flux, and is both perfect and unchanging. It is with this element that I have identified the beauty which, glimpsed by the artist and the musician, is reflected in their works, and the goodness which is revealed by the study of ethics. This element is, therefore, the source of what we are accustomed to call value. Our discussions have, moreover, suggested reasons for regarding it as fixed and absolute, a static non-human object of human apprehension. Although I speak here, for purposes of convenience, of an element, we have seen no reason for identifying the beauty which is manifested in music and painting with the goodness of which we have intuition in moral experience; this permanent element is, therefore, not one entity but two, and we may see reason later to include other factors in the category of permanence. I propose throughout this chapter and the next to use the word 'reality' to designate whatever entities in the universe are static, perfect, and changeless, and are regarded as possessing value. Reality will not then mean all that is; there are other factors in the universe, for example, life and matter, which I regard as completely real, but which I nevertheless wish to exclude from the class of entities which I designate by the word reality, and it is important, if confusion is to be avoided, that this special and restricted sense of the word should be borne in mind. Subsistent objects also belong to the world of reality, but are to be distinguished, as we shall see later, from objects of value.

Given our inability to explain the significance of aesthetics and ethics without the introduction of this element of reality, the question arises, What provision can be made for it in the vitalistically conceived universe described in Part I? That universe is one in which life evolves and emerges at continuously higher levels through interaction with matter. Thus the world of Part I was a world of perpetual change; life was itself a principle of change and development, while matter was subject to changes of the type studied by physics. How, then, are we to find accommodation in a universe of this type for an element of changeless perfection?

How can we reconcile the static and the absolute with the changing and the relative? How find a *modus vivendi* between Parmenides and Heraclitus? It is this task of reconciliation which will occupy us in different ways throughout the remainder of the book. In this chapter we shall be concerned with the general question of the relationship between what changes and what is permanent, and with the significance of value in a world of flux. In a final chapter I shall try to illustrate this *general* reconciliation in the light of the account which I have given of the evolving world of life in Part I, and the meaning which has been assigned to aesthetics and to ethics in the immediately preceding chapters.

I. A CHANGELESS OR A CHANGING UNIVERSE.

I am well aware that in admitting permanence and perfection into an otherwise fluid universe, I am departing from the tradition of most vitalist systems. The Forms of Plato and the *élan vital* of Bergson are strange bedfellows, and it will seem to many that in insisting on finding accommodation for both, I am illegitimately making the best of both worlds; illegitimately, because, whereas the concepts both of change and of permanence give rise to their particular difficulties, I lay myself open to the charge of proposing to solve these difficulties by the simple expedient of dropping one of the two principles whenever it becomes embarrassing, and proceeding to carry on with the other. This gives the appearance of having it both ways, besides outraging the instinctive monistic tendency which predisposes us to insist on a rigorous economy of cosmic constituents, as a preliminary to reducing all of them to one.

But my attempt is by no means unprecedented. Even the most empirically minded philosophers have found difficulty in resisting the temptation to dally with the Absolute, and the permanent and the perfect have surprisingly found their way into the most fluid universes. Often enough they have been driven publicly out of the front door, only to be introduced surreptitiously (and usually in the last chapter) through the back. Professor Whitehead invokes eternal objects to 'ingress' into the flux of spatio-temporal events, while Shaw's Ancients in the last play of the *Back to Methuselah* pentateuch, having outlived love and passed beyond art, devote the vast tracts of their prodigious lives to the study and contemplation of immutable entities apparently of a mathematical character. Even Schopenhauer, having postulated a dynamic unconscious impulsion as the essence of the universe, finds himself under the necessity of representing as a form of its objectivation the perfect and apparently unchanging forms and patterns of music

and art. Plato's Forms, in fact, with all the permanence and perfection that they imply, are implicitly envisaged by Schopenhauer as a manifestation of the dynamic Will. Even William James, in spite of his temperamental objection to Absolutes, which just *are* whether we like it or not, finds in religious experience a foretaste and a guarantee of both permanence and perfection.[1]

There are thus good precedents for the admission of a changeless real into a vitalist universe, even although it must be granted that the introduction of such an element seems to have been usually something of an afterthought, reality being tacked on, as it were, in the last chapter to a universe of flux.

More frequently, however, monistic prepossessions have had their effect, and the admission of change into the universe has speedily led to its identification with the whole of reality. Just as those who have argued for the static have proceeded to assert that all is static and change is an illusion, so those who have argued for change have proceeded to assert that there is nothing but change. On the one side there are Parmenides, Spinoza, and Herbart, on the other Heraclitus, Leibnitz, and Bergson. Feeling strongly the attraction of both principles, I am so far under the sway both of Parmenides and of Heraclitus that I cannot see my way to reject the arguments of either; but in order to make due allowance for those of both I find myself constrained to limit their application.

Let us see very briefly what the arguments are which, whether they point to changelessness or to change, have seemed to philosophers so impressive that they have wanted to bring everything within the scope of one principle or the other.

1. *Reality as changeless.*

The argument that change is an illusion and that reality is itself changeless is applied with considerable force to all that is. According to Parmenides, reality as a whole, the sum total of all that is, cannot become either more or less than it is. It could only become more by the addition of something from without, or by the development of something from within. The addition of something from without is impossible, since, if you start with literally all that there is, there is nothing outside the universe to be added; the development of something from within implies the potentiality for this development as already latent in the universe, that is to say, the development does not constitute a real addition. Equally the universe cannot become less than it is. The diminution of the universe would imply that some portion of it had been withdrawn

[1] See W. James, *Varieties of Religious Experience.*

and had proceeded out of the universe; but once again, if you start with all that is, there is nowhere outside the universe whither the withdrawn portion may proceed. Therefore no portion of the universe can be withdrawn in such a way as to pass beyond or outside it. Similar arguments can be applied to the increase or decrease of any particular element or factor in the universe. *E nihilo nihil fit, in nihilum nihil posse reverti*, we are told, from which it follows that whatever is cannot become more, nor can it become less than itself.

If these arguments are valid, they may be extended to show that he universe cannot change in respect of any of the particular *qualities* that it exhibits, any more than it can change in respect of the *quantity* of its total content. For example, philosophers have urged that an examination of the law of cause and effect shows that there cannot at any time be more in an effect than there was in the cause, more in a product than there was in its ingredients, and the maxim that 'there cannot be in the consequent anything more than, or different in nature from, that which is in the antecedent', is quoted in criticism of modern theories of evolutionary emergence. 'The principle *e nihilo nihil fit*', says Professor A. E. Taylor, 'is fundamental to all explanation', and it is therefore 'true that no cause can contribute to its effect what it has not to give. The full and ultimate cause of every effect in a process of evolution will', however, 'have to be found not simply in the special character of its recognized antecedents, but in the character of the eternal which is at the back of all development. And this must contain', though 'in a more eminent manner . . . all that it bestows, though it may contain much more'.[1] The process of evolution, therefore, which appears to be a process of change is merely a process of revelation of what already is.

Bosanquet develops a similar line of thought with considerable force.[2] His argument appears to be that, although the universe contains change and development, the changes which it exhibits fall entirely within the matrix of its whole nature. The effect of an apparent change, therefore, is to reveal more of that nature, or rather to reveal it under a new aspect; the apparent change does not presuppose any alteration in the nature of the universe itself: as, when a mountain is revealed through a shifting wrack of mist, at one time one part of it is seen and at another time another part, sometimes more of it and sometimes less, yet these changes in the

[1] A. E. Taylor, *Evolution in the Light of Modern Knowledge*, p. 460.
[2] Bosanquet, *The Meeting of Extremes in Contemporary Philosophy*, Chap. IX, pp. 177–83.

extent and nature of what is revealed do not presuppose any change in the mountain itself. Hence the belief that the universe as a whole changes rests, for Bosanquet, upon a false analogy with the changing finite things within it. Change is, indeed, the necessary condition of the being of finite things, which tend to run a course just because they are partially and only partially revealed aspects of the whole. But the universe, 'the total itself of all that is', while it is the ground of the changes that appear in the finite, 'the unique and only source and foundation of all that in any way comes to pass',[1] is itself changeless. 'It is the ultimate real in which lies the fact that anything at all', including change, 'is and can be, and the ultimate characters which are, in virtue of that fact'.[2] As to the apparent changes in which its nature is progressively revealed, we are told that they are not 'progresses or advances, which involve moving away from its own nature, and diminishing itself on one side as it intensifies itself at another. That is the growing of a *finite* creature'.[3] An infinite whole, Bosanquet continues, 'must live out alike to all its sides and aspects, must expand into and live itself out in all values, but constrict itself into a history in respect of none'.[4] Since whatever is less than the whole, being but a partially revealed aspect of it, is for that very reason only partially real, it follows that the changes through which the finite passes, like the finite itself, are not themselves of the essence of reality. Hence the statement that *the whole* does not and cannot change rapidly resolves itself into the assertion that change owns no part in the essence of things, since whatever can and palpably does change, being something which is less than the whole, reveals itself for that very reason, in respect, that is to say, of its very attribute of finiteness and change, as something which is less than real. Change, then, to put it bluntly, is an illusion.

2. *Reality as Change.*

If the arguments of those who argue for the reality of change are not less powerful, not less marked is the readiness with which they allow themselves to drift into the acceptance of the principle which their arguments establish as all-including. The two most famous contemporary exponents of the view of the universe as change are Bergson and Croce. I have already devoted some little space in Chapter II to a statement of their positions, and there is no need to recapitulate what has already been said.

Briefly, the argument, at any rate as it appears in Bergson, goes

[1] Ibid., p. 179.
[2] Ibid., p. 181.
[3] Ibid., p. 183.
[4] Ibid., p. 183.

to show that, if the fact of change be admitted at all, then it is impossible to stop short of the conclusion that everything is change; that change, in short, is the sole type of reality. To illustrate this conception let me recall the passage at the beginning of *Creative Evolution* already quoted in Chapter IV.[1]

> Take [says Bergson] the most stable of internal states, the visual perception of a motionless object; the object may remain the same, I may look at it from the same side, at the same angle, in the same light: nevertheless, the vision I now have of it differs from that which I have just had, even if only because the one is an instant older than the other. My memory is there, which conveys something of the past into the present. My mental state as it advances on the road of time is continually swelling with the duration that it accumulates.

The perception of external objects is perhaps the most stable mental condition of which we are capable. If it is fluid, then our emotions, desires, willings, and sufferings are still more fluid. Nowhere can be found any psychological entity, define it as we may, that is not changing. If, as Bergson says, 'a mental state ceased to vary, its duration would cease to flow'. 'We change', therefore, 'without ceasing, and the state itself is nothing but change.'

It follows that the notion of a thing that changes is a contradiction in terms. You cannot separate the unchanging part of the thing to which the changes occur from the changes that occur to it; you cannot, that is to say, affirm of any part that it is *the part that changes* in the sense that, while changes occur to it, it itself is other than they; therefore, there is no part that changes, there is only change; hence, the notion of a thing which is made up of changing parts and is, therefore, a changing thing must be abandoned. If the conception of a changing thing is inadmissible, the distinction between a thing and the changes that happen to it must be abandoned. Change, therefore, is everywhere and is everything; it is the very stuff of reality, and the attempt to establish a reality which changes as other than and opposed to the changes which occur to it is bound to fail. The real, therefore, is change, and permanence is an illusion.

3. *Change and Permanence are both real.*

The identification of change with all that is seems to me to be as erroneous as the assertion that all that is is a changeless unity. The argument against the admissibility of the notion of a thing that changes is no doubt valid so far at least as the physical world is concerned. But the truth that there are no changing

[1] Bergson, *Creative Evolution*, pp. 2, 3.

things does not justify the assertion that there is, therefore, nothing but change. We may agree that there is nothing but change in the world of becoming, which is revealed by the changing awareness of evolving life. But there is nothing in the argument to necessitate that this is the only world, nothing to necessitate that there may not be entities, members of another world, which do not change at all.

The extension of the argument which shows that, if things change, then their whole reality is change, to prove that there is, therefore, nothing but change, like the extension of the argument for the necessity for permanence to prove that everything, therefore, is permanent, seems to me to rest upon an unconscious and unjustifiable presumption of the universality of continuity. So completely are we under the dominance of this conception that we unconsciously assume that the discontinuities in nature are apparent only, and that a closer investigation will reveal an underlying continuity. We have, in other words, a horror of gaps which renders us incapable of supposing that there are absolute and objective differences in the nature of things. This horror is so ingrained in our thinking that we are unconscious of it. A vitalist, for example, will show convincingly that a denial of the reality of creativeness reduces the notion of change and development to the rearrangement of the already given. In the course of demonstrating how inadequate is the concept of the rearrangement of material to give a complete account of the evolution of life, he proceeds to apply his argument not only to what is but also to what is valuable, with a sublime unconsciousness that any assumption is involved in the extension.

The following extract from an article by Professor A. O. Lovejoy in defence of the notion of real emergence is a good illustration of this unconscious assumption.

> If the sum of being *and the sum of realized value*[1] are constant—and unless they are either constant or diminishing; . . . there *is* absolute emergence—then, the whole movement and travail of the creation is but a barren shuffling about of the same pieces, an increase or ascent in one region must be simultaneously compensated by an equivalent decrease or decline elsewhere.[2]

This implies that what is true of being is also true of value, so that, if there is real change and creativeness in the world of life—and if there is not, then the universe is meaningless—there must be equally a continual coming-into-being of what is valuable.

[1] My italics.

[2] Lovejoy, 'The Meaning of Emergence and its Modes', *Journal of Philosophical Studies*, vol. ii, No. 6, pp. 170, 171.

It is my thesis in this book that certain regions of reality differ not relatively but absolutely, and that there exists, therefore, between them a real discontinuity. The world of life and the world of value are different regions in this sense. It is the unconscious shrinking from discontinuity that makes this belief so difficult of acceptance. The human mind cannot easily endure the thought of a universe which contains a number of absolute and absolutely different elements. Such a universe proclaims too insistently its character as a mere arbitrary given, something that just is whether we like it or not, to commend itself to the modern mind. And so, as I pointed out in the second chapter, there is an attempt to exhibit apparently opposed things as differing only in degree, as though in reality there were a continuous scale leading from one to the other. Since one of the opposed things is undoubtedly human experience, a metaphysic which succeeds in this attempt finds little difficulty in showing that the homogeneous real that results is infected with, if it is not created by, the human mind, thus transforming the unfriendly and arbitrary plurality with which it started into an intelligible unity.

Now there are in my view at least three different sorts of entities in the universe. There is the world of inorganic matter which is studied by physics and chemistry, the world of changing and developing life which is the subject-matter of biology and psychology, and a world of permanent subsistent entities which is intimated to us in ethical and aesthetic experience with varying degrees of clarity and which we vaguely regard as the source of value.[1] Although related these worlds are separate and discontinuous, the relationship between them being one which may roughly be expressed by saying that life evolves in and through the awareness of matter to a contemplation of the world of value.

Modern philosophy in particular seems to me to involve itself in difficulties, because, in its horror of discontinuity, it blurs the sharp edges of distinction between these different worlds. There is in most modern thought a constant and, to my mind, illegitimate bridging of gaps. Thus the scientist, swayed by an unconscious, monistic metaphysic, bridges the apparent gap between life and matter, and exhibits both as conformations of material. Vitalist philosophers bridge it from the other side and exhibit both as aspects of a creative stream. Having successfully eliminated matter, they then proceed to a further unification by bridging the gap that separates the changing world of life from the permanent

[1] The place of subsistent objects among the entities which belong to the world of value will be considered later, pp. 380-384.

world of ethical and aesthetic values. Assuming that whatever is non-material must be vital, they fail to make any distinction between different orders of the non-material. Thus having routed the materialists, they are impelled by the momentum of their victory to attempt to restate the whole of religion, ethics, and aesthetics in terms of Vitalism. That literature may be so interpreted I have tried in Chapter V to show, but the attempt, if carried further, must, I think, necessarily fail. God cannot be defined in terms of life or progress; the beauty of a piece of music does not change.

Modern philosophy, in its reaction from Scholasticism on the one hand and from Absolutist Idealism on the other, seems to make little or no provision for the uniqueness of our feeling for religion, for ethics, or for beauty. Religion and art spring not from a delight in life but from a feeling for certain absolute values which are recognized to be independent of the vital and the changing. The vitalist and the neo-idealist ignore this fact, and seek to identify God with the ultimate development of human progress, while the neo-realist, obsessed with the problem of perception and bemused with sense-data, makes no provision for our apprehension of the non-material and the permanent. In opposition to this tendency, I shall try to show that it is of the essence of value that it should be distinguished from the movement towards it; that, as Professor A. N. Whitehead puts it, 'There cannot be value without antecedent standards of value, to discriminate the acceptance or rejection of whatever is before the envisaging mode of activity';[1] that value, in other words, logically precedes the apprehension of it, and is logically independent of it.

As to the reason for this modern neglect of the world of reality, a neglect which leads to a subordination of the non-human and the absolute to the human and the changing, I propose to make certain observations in the course of setting out my own view of value later in the chapter. For the present, it is sufficient to point out that the tendency in question is based not on any *a priori* necessity but upon the horror of discontinuity by which the modern mind is peculiarly beset. For the modern mind everything must be pronounced to be change, or else change itself must be proclaimed an illusion; but such a choice of alternatives is no more a necessity of human thinking than the presumption in favour of Monism which I discussed in the second chapter. It finds no place in Eastern philosophy: the Buddhists, for instance, accept the world of sensory experience as perpetual becoming, without identifying becoming with the fundamental nature of reality.

[1] Whitehead, *Science and the Modern World* (1925), p. 221.

With these general observations on the tendency to ignore differences which are for me fundamental, I turn to more detailed considerations. I have already advanced arguments of a general character in favour of Pluralism, and have protested in particular against the identification of life or mind with matter. My next step is to endeavour to establish the reality of the further gap between life and the world of value. What objections, then, can be brought against the views, first, that the permanent reality is all-embracing and the changing and developing spirit an illusion, and secondly, that the changing and developing spirit is everything and that there is no such thing as a perfect and permanent real?

II. THE ARGUMENT FOR DISCONTINUITY.

1. *Criticism of the exclusively changeless real.*

Mr. Bosanquet's contention that the whole cannot change is an affirmation about everything that is. Such changes as appear to take place within the world that we know, since they cannot for the reasons he gives be changes on the part of the universe as a whole, are illusory. The view that change is illusory has already been criticized in Chapter II, in the discussion of Absolutist Monism. The criticism there suggested can be put in the form of a dilemma. Either the changes which appear are illusory, or they are not. If they are illusory, then error, namely, the error we make in thinking them real, is itself part of the real and the real is not a unity; if they are real, then change is part of reality and it is not, therefore, true that reality as a whole is changeless.

That the arguments advanced by Bosanquet and others prove that there is a changeless element in the universe I do not deny. It is indeed to this element that I am applying the term 'reality' in the restricted sense I have defined. It is the extension of these arguments to embrace everything that is that seems to me fallacious. The fallacy involved is indeed so patent that it is a matter for wonder that it should be overlooked. Consider, for example, the analogy, of which we made use above, of an unchanging mountain of which now more and now less is revealed by the shifting mists. In so far as it is used to indicate the presence in reality of something which remains permanent and changeless, in spite of our changing apprehension of it, the analogy serves its purpose. But when it is sought to include the mists themselves and the shifting vision which they reveal to the observer as falling within the same changeless category as the mountain, it obviously breaks down. Yet this is what, if Bosanquet's view is right, the analogy must be made to do. For him the changing revelation of the

mountain is ultimately to be regarded as a revelation of reality to itself. The mountain, the mists which shroud it, and the observer's vision of it through the mists, are all parts of the same whole, a whole whose parts are related in such a way that a change in any one of them involves a change in all the others and, therefore, in the whole itself; and it is of this whole that we are asked to believe that it does not change. This belief is, I think, a delusion. The fact for which we have to account is that the view of the mountain that I have here and now is different from the view that I have just had, and different again from that which I am about to have. Of a number of possible aspects one and one only is revealed to a particular observer here and now; in no sense at all are all of them revealed. If, then, we are to maintain that the whole, that is to say, not only the mountain itself but also the views which we have of it and the relations between them, is changeless, our only course is to write off the apparent change which reveals first one aspect and then another as illusion. Yet this, as we have seen, leads to the attribution of error to the real.

Let me state precisely what it is that I am maintaining. The facts of aesthetics and ethics point, I affirm, to the existence of a permanent and perfect element in the universe; this element, I hold, is other than and independent of the apprehension of it which we have in aesthetic and moral experience, an apprehension which is both changing and partial. It is also distinct from the world of matter in and through which life evolves. This latter distinction brings us to an important feature in respect of which the view that I am putting forward differs from that of Plato.

Plato's world of Forms is the archetype of the conception of the permanent and the perfect that I am suggesting. Of this world which is, for Plato, the real world, we obtain glimpses which are fleeting and imperfect, our view of reality being limited by two different factors of which the first is the circumstance of the soul's imprisonment in a material environment which distorts its view, and the second, the fact that the Forms themselves are manifested for us in an obscuring medium, the chaos of not-being, in which their shape is only dimly perceptible. It is in regard to this second limiting factor that, I venture to suggest, Plato's view is open to criticism, and that on the very ground on which I am at present taking my stand, namely, that it involves, and does in fact lead Plato to the denial of the reality of change.

For Plato the world of Forms is not only the cause of our knowledge of the sensible world, but is also the cause of its existence; so much at least is clear from the famous analogy of the relation

of the sun to the visible world in the Sixth Book of *The Republic*.[1] It is this latter assertion which in due course leads Plato into serious difficulty, the difficulty, namely, of giving a satisfactory account of the relationship between the Forms and the particulars in which they are manifested. Plato sometimes speaks of the relation as one of participation by the particulars in the Forms, sometimes as one of imitation of the Forms by the particulars. If the relationship is participation, there is the difficulty of explaining how the real and the static can be the innermost core and essence of the being of the semi-real and changing; if it is imitation only, then the belief that the Forms are the *cause* of the existence of the particulars must be given up. In the Sixth Book of *The Republic* Plato takes a way out of the difficulty which is ultimately indistinguishable from that of Monism. The Form of the Good, we are there told, is the source of the being both of the other Forms and also of the sensible world;[2] the ultimate vision of the Form is, moreover, one which reveals both the Forms and the sensible world as partaking in it, merged in it, and inseparable from it.

This conception, in so far as Plato's theory reduces itself to it, is different only in form from the Idealist view of the Absolute as an eternal unity which is at the back of all development, and contains pre-existent in itself all the forms of being which are progressively realized in the world of appearance. The implications of this view seem to me to be frankly self-contradictory. The eternal existence which is behind the world of change is itself exempt both from succession and from change; nevertheless we are required to believe that it contains within itself all that appears in its temporal effects. In other words, all the distinctive qualities of the world of temporal effects must be predicable also of it; one of these distinctive qualities is apparent change; apparent change must, therefore, be implicit in reality. If, however, to avoid this difficulty, we take the argument the other way round and insist that the change that appears in the effects is merely apparent, in the sense in which to be merely apparent is to be illusory, the position is not improved, as the following considerations show.

The Forms in general, and the Form of the Good in particular, are static and perfect. Therefore, whatever partakes in the Form of the Good and is capable of being merged in it must also be static and perfect. The sensible world is changing and imperfect;

[1] Plato, *Republic*, 508, 509.

[2] Ibid., 509: 'Then you may say of the objects of knowledge that not only their being known comes from the good, but their existence and being also come from it, though the good is not itself being but transcends even being in dignity and power.' (Trans. A. D. Lindsay.)

therefore the sensible world and the change with which it is infected must be ultimately unreal. If change is unreal, the doctrine of emergence, which asserts that life develops through the appearance of new qualities and existents, must be given up. The only change that is possible in the universe on this basis is the rearrangement of eternally-existing materials; novelty is an illusion, and there is, therefore, in the present phase of terrestrial history no existent whatever, whether quality, event, or entity, which could not have been discerned and described by a scientific angel observing the gaseous-nebula stage of the development of our solar system. There is, so far as I can see, no logical objection to this hypothesis; but equally there is no reason to think that it is true.

The alternative hypotheses that either the real is nothing but change, or else that there is no change in the universe at all, seem to me to follow, and to follow necessarily, upon the attempt to make the relation of the real world to the sensible world that of immanence. Once reality, conceived as Plato conceived it and as it is conceived here, is made the source of the being of the changing, sensory world, then it is impossible to avoid the conclusion that change in general is unreal, that the particular form of change which is asserted by the doctrine of emergence does not occur, and that the world of evolving life is illusory. This conclusion leads in turn to the monistic metaphysic which we have seen reason to reject. It seems, therefore, to be necessary to maintain a rigid distinction, a gap of real discontinuity, between the changeless reality of the world of values and the worlds of life and of matter, if the claim of these last to real as opposed to apparent existence is to be sustained. It is for this reason that I have envisaged the relationship between subsistent objects and their physical counterparts as accidental and contingent, emphasizing the fact that there is no reason in the nature of things why some subsistent objects should have physical counterparts and not others. The subsistent objects are not for me as they are for Professor Whitehead, for example, ingredient in the passage of events; they are simply the patterns or archetypes of all the qualitative differences that the world of change may be found progressively to develop. For the same reason again I have refrained from deriving the beauty of music from an actual manifestation in the medium of physical sound of the forms or patterns which exist in the world of reality. I have confined myself to the suggestion that the musician, having by virtue of his insight apprehended the copies of these patterns in the material world, endeavours to reproduce

them in the medium in which he works. It is the musician's memory of the images of the real world that confers beauty and significance upon his symphony; reality is not the innermost cause of the aesthetic quality of his composition, but merely the archetype on the model of which he strives to fashion his material. It is only on some such hypothesis as this that it seems possible to maintain unbridged the gulf that separates reality from the world of change and becoming.

One further criticism of the concept of permanence and perfection which finds expression in Plato's Form of the Good may be ventured. So far as his theory of knowledge is concerned, Plato shows himself a thoroughgoing realist. Knowledge is always *of* something, there being no disposition anywhere in the *Dialogues* to run the act of knowledge and its objects together, or even to maintain continuity between them. Thus the philosopher who apprehends the Forms is never identified with the nature of the real world which he contemplates; he himself still belongs to the world of becoming. This thoroughgoing distinction between subject and object is, as I have tried in Chapter III to show, fundamental, in my view, for any satisfactory account of knowledge.

Now in identifying, as he seems to do, the knowledge of the Form of the Good with the Form itself, Plato appears to be affirming of the apprehension of the Form of the Good precisely the contrary of what he affirms of any other type of apprehension, whether it be of sensible objects or of the other Forms. Not only is he bridging the gap between the sensible and the real worlds, but he is destroying the distinction between knowledge and its objects. Unless, therefore, we are to commit ourselves to the view that knowledge of reality is different in kind from knowledge of anything else, so that none of the conclusions to which our analysis of the knowledge relation has led us are true of it, but rather precisely the reverse conclusions, we shall maintain that the familiar subject-object relation involving, as I have tried to show, a radical distinction between subject and object, is the relation that holds between knowledge of reality and reality. There is thus no reason to suppose that the end of evolution, if it is to be found, as I am suggesting, in a complete and untrammelled apprehension by life of reality, involves a merging or absorption of life in the reality apprehended. There will always remain a fundamental dichotomy between knower and known; dualism, in other words, will never be transcended.

2. *Criticism of the exclusively changing real.*

I now turn to consider the reasons which lead me to reject the Heraclitean view that there is nothing in the world but change.

(1) The first of these is one which I have already advanced in Chapter II in criticism of the infinite process postulated by Croce and Gentile. With the arguments advanced by Bergson to prove that change is real I am prepared to agree; I grant, too, his further contention that life, if it changes at all, must be a principle whose very nature consists in, although it is not necessarily exhausted by, change.[1] I am prepared, therefore, to accept the conclusion that follows, that anything of which change is affirmed must be spoken of in terms appropriate to an energy or activity rather than in those applicable to an object, and it is for this reason that in Chapter III I committed myself to a theory of knowledge which denied mental existents and refused to regard the mind under any aspect except that of continually changing activity, the activity in question being one of awareness. But just as I was unable to regard the establishment of life as a dynamic, changing activity as a reason for dispensing with matter, so do I refuse to find in this conception a justification for eliminating the element of perfection and permanence which is the world of value. Unless there is something static and fixed in the universe to act as the goal of the process of evolution, then the process of evolution must of necessity lack both point and meaning.

Gentile, if I understand him aright, identifies such permanence as he is prepared to admit in the universe with the circle of categories which, reproducing each other in the rotation of a ceaseless dialectic, form the very being of the self-creative thinking which is reality. The end of the process of reality is, in other words, localized within the process itself. As I ventured to point out in Chapter II,[2] a process so defined is certainly not a progress, since there is nothing to which the process can move, and nothing in which it can occur except itself; it is even doubtful, therefore, whether it can be called a process. I suggested, then, that in order that the movement of evolution may be credited with objective reality, in order, in short, that it may be a true change, there must

[1] By the statement that life is not exhausted by change, I mean that to say that life is continual change, is not to give a complete account of life. There can be qualitative differences between two continually changing activities, one unit of life being, for example, differentiated from another in terms of the objects of its awareness. Life itself, although undeniably a process, is a continuing entity over and above the changes which its individual manifestations at any given moment exhibit. See Chap. IV, pp. 199–203.

[2] Pp. 77–79.

be something other than the movement to and in which the movement can occur. It is this something which I have called life, or the Life Force, which is the matrix within which the process of its own development, which is growth in awareness, takes place.

(2) But if something other than mere movement is required in order that there may be process, we require to invoke a further principle in order that the process may be a progress.

Progress is process in a certain direction, and process in a certain direction implies a goal to set the direction; it is only by reference to such a goal that the degree of progress which has been achieved can be measured. A goal which is located within the process itself can neither set a direction, nor can the distance from it of the movement which seeks to achieve it be measured. It ceases in fact to be a standard of measurement just in so far as it is conceived, not as an object possessing value in its own right, but as that which derives its value from the fact of the movement towards it. The concept of progress implies the existence of standards by which movements may be measured and development affirmed, and these standards must be other than, and prior to, the movements and objects to which they are applied. In asserting with Professor Whitehead that value must itself be antecedent to what is valued, I am implying that what is valuable is both other than and independent of that which is judged in terms of value. Value, therefore, the apprehension of which I conceive to be the goal of evolution, cannot be placed within or identified with the movement towards it, either at any stage of that movement, or at its completion. The conditions which are, in my view, necessary to such apprehension will be indicated at the end of this chapter.

I have gone out of my way to emphasize this point because of the failure of most vitalistic philosophies to make adequate provision for the objectivity of value, a failure which has the effect of leaving the whole process of evolution upon which they insist in the air, without either rationale or justification. Of the deficiency of Neo-Idealism in this respect I have already spoken, but that this deficiency is typical of much modern thought may be seen by considering the positions of two philosophers, Schopenhauer and Nietzsche, who in their attitude to value may be regarded as the forerunners of the modern spirit. Schopenhauer is obsessed by the doctrine of the struggle for survival. It is in terms of this struggle that the movement and development of the various forms of the objectivation of the Will are to be interpreted; they are what they are, because of the continuous struggle in which they are engaged. But since, as we have seen, Schopenhauer's metaphysic is fundamentally

monistic, there is nothing against which the Will (in one of its manifestations) can struggle with the exception of itself (in another of its manifestations). Thus we are told that every grade of the Will fights for the matter, space, and time which are occupied by other grades. Nature, in short, exists in and through struggle.

From this concept the pessimism of Schopenhauer naturally derives. The Will is a restless, continuously changing impulsion, which manifests itself in the individuals who are the temporary manifestations of the Will as want or need. Want or need is painful and prompts activity designed to allay the need. It is because of this activity that struggle is inevitable and continuous. When the want is satisfied, pleasure is felt, but felt only for a moment, since, as the condition of living is needing or wanting, the satisfied want is immediately replaced by another. Thus pleasure is conditioned by preceding need, and disappears so soon as the need is no longer felt. As a consequence, those who cultivate pleasure continuously as an end succeed only in achieving boredom and satiety, since they are endeavouring to secure what is dependent upon need without suffering the pain of the need upon which it depends.

In the Appendix to Chapter IV I accepted in essence this account of pleasure, deducing from it the fallacy of hedonism as a practical philosophy of life. But while agreeing with Schopenhauer as to the impracticability of making pleasure our end, I felt unable to share the pessimism which, in his view, was thereby necessitated. If life is to be valued according to its individual profits in pleasure, I agree that it is not worth living. Hence the Life Force which urges us to live is a malign torturer or a blind bungler, and the only legitimate object of desire is the Nirvana of the stilling of the will and the consequent setting of life's sun 'into the blind cave of eternal night'.

But one of my main contentions has been that the valuation of life in terms of individual pain and pleasure is irrelevant to its main purpose. Life, I have affirmed, is not to be judged in terms of its ability to give pleasure to its individual units, whose *raison d'être* is to be found rather in their utility as instruments for furthering the purpose of evolution.

I have now reached a stage at which I can begin to give a meaning to this purpose, in terms of the increasing apprehension of that reality with which I have identified the world of value. I have, therefore, a formula for progress in evolution which is based upon the existence of something outside the process which moves towards it, and can invoke an objective standard whereby to measure the progress of life. But for Schopenhauer this standard

of appraisement is not possible. If we are to recognize nothing beyond the Will, there can be no objective value to which its individual manifestations may aspire. Life, then, reduces itself to a pointless succession of desires, and the most that we are entitled to hope is that each desire may find satisfaction as it successively arises. On this basis Schopenhauer's demonstration of existence as a necessary failure is inescapable, since, although pain exceeds pleasure because our wants multiply more rapidly than our ability to satisfy them, the pleasure of satisfaction is nevertheless, in his view, our only standard of value.

Granting that the character of life as a changing dynamic activity precludes the possibility of enduring pleasure, I am nevertheless freed by my affirmation of objective value from the necessity of sharing this pessimism. For me, life is not a mere succession of desires, but a process of continual enrichment and of advance through enrichment. Higher-quality life is life endowed with the capacity to apprehend higher types of object, the end of the process being the emergence of a level of life which is capable of a direct and sustained awareness of reality. A process which, for Schopenhauer, is a succession of unsatisfied or partially satisfied desires becomes, therefore, for me a continual progress towards a goal which is reality itself, a progress which, while offering, perhaps, in terms of immediate happiness rewards no more abundant than those whose meagreness Schopenhauer laments, is nevertheless capable of being judged according to another standard in terms of which it is shown to possess both utility and significance. The possibility of the application of such a standard depends upon the admission of an element of objective value external to the process of life.

Nietzsche presents us with a concept of evolution (I am overlooking his somewhat inconsistent doctrine of eternal recurrence) in which each successive type that is evolved is represented as higher than the last. Professor Alexander illustrates the same conception from another point of view, when he defines each stage of evolution as standing in the position of godhead to that which has already emerged. Man for Nietzsche is not only a later but a higher emergent than the animals, and the doctrine of the Superman envisages the appearance of a new type of being who will be higher than man. Nietzsche devotes considerable space to a description of the Superman of whom a number of forerunners have already appeared. He will be subject neither to the social nor to the individual morality of the herd; acknowledging no ties, bound by no obligations but the laws of his own development, he

will be a self-sufficient, independent citizen of the world. Above all, he will stand pre-eminent in respect of his power; power, in fact, is, for Nietzsche, the criterion of value.[1]

We are here presented with a definite standard in terms of which to measure and assess the advance of evolution. The Superman is not only a later evolved product than the ordinary man; he is a higher and more valuable type. I find no difficulty in principle in accepting this conception; I merely emphasize the point that it is only admissible if we are prepared to accept a standard of value which is itself distinct from the movement of evolution which is measured in terms of it. If there is an objective goal at which evolution may be said to be aiming, then there exists a standard by which the degree of approximation to it which has been achieved may be measured. You can say, for example, that the Superman is higher than the man, because he is nearer to that goal. This conception in turn presupposes the possibility of an apprehension, however dim, of the nature of the goal; otherwise we could not know that the qualities upon which the alleged claim of the Superman to be higher rests, were in fact of such a kind as to entitle the possessor to be considered to approximate more closely to the goal.

In the absence of such an independent goal and the standard of valuation which it establishes, the superior 'height' or 'value' of the Superman cannot be maintained. To say that he is 'higher' because he has more power begs the question at issue, since we cannot know that power is a criterion of advancement. To insist that it is such a criterion because the Superman possesses it and the Superman is the highest evolutionary product is to make him both judge and jury in his own cause; it is the Superman who judges power to be a test of superior value, and the Superman who by that test is judged superior. It is to this position that the endeavour to assign values to stages in a process without at the same time recognizing a standard of value which is independent of the process necessarily reduces itself. Nietzsche does not provide us with any such standard, nor indeed does Bergson, Schopenhauer, or Croce. Each of these writers does, nevertheless, continually attach values to various stages and factors in the process with which reality is identified.

(3) Let us suppose that we are right in regarding as illegitimate the application of standards of value to a universe conceived as evolutionary change and as nothing but change. Why, it may be asked, need they be applied? Let us assume that the vitalist

[1] See e.g. Nietzsche, *Beyond Good and Evil*, Chap. II, 'The Free Spirit', § 36.

remains consistently within the framework of his premises and resolutely refuses to assign values to the process he describes; that he confines himself, accordingly, to affirming of any stage in the process that it is merely later in time than the preceding one, without asking us to believe that it is of higher quality. May we not rest content in such a position? Is there, indeed, any necessity to introduce the concept of value at all?

I have already suggested an answer to this question in Chapters VI and VII, from which I concluded that it was impossible to explain the facts of aesthetic and ethical experience on purely subjectivist lines. Music, for example, seemed to reveal the existence of certain patterns and arrangements whose significance lay in the fact that, though they could be reproduced in the material sounds of this world, they were themselves inhabitants of another. Moral experience could only be explained on the assumption that it involved an intuition of value which was recognized as being outside the world of becoming, in which the action that was recognized as being moral took place. The status I have assigned to art and to ethics will serve as a clue to the general position with regard to value that I wish to set forth. We have now reached a stage in the argument at which an attempt to state this general position must be made. In the course of setting out the considerations upon which it rests, I shall at the same time be indicating the third of the reasons which I wish to bring forward against the belief that the universe is change and nothing but change. I can most conveniently introduce the matter by first saying something of two alternative types of explanation, to either of which recourse may be had when we endeavour to give an account of the nature of any entity.

Teleological and 'ab origine' types of explanation.

That the interpretation of the significance of music given in Chapter VI is by no means necessitated I should of course readily admit. It is possible—the attempt has indeed frequently been made—to explain the appeal and significance of music in terms of its origin in response to the needs of primitive peoples. The recourse to this kind of explanation is indeed always possible, whatever the entity with which we are concerned, but, although always possible, it is not always satisfactory. Besides the explanation in terms of the origin of a thing, there is the further explanation which seeks to interpret a thing in terms of what it is aiming at or trying to become; this, the teleological mode of explanation, is often found to be fruitful when the other seems inadequate.

We have, then, the admitted fact that some types of entity lend themselves most easily to explanations *ab origine*, others to teleological explanations. Now, the point I wish to make is that the difference between the kinds of entities and activities to which the two explanations are respectively applicable is precisely the same as the difference between those entities and activities which can be satisfactorily described without the introduction of an element of permanence or perfection in the universe, and those which seem, in order that a full account of them may be given, insistently to demand it.

In the use which has been made of these two alternative types of explanation we may see a repetition of the whole-hearted exclusiveness with which philosophers have employed the concepts of change and permanence. Just as the notion that there is change and the notion that there is permanence, when they have been employed at all, have been grossly overworked and unwarrantably extended, so with both the *ab origine* and the teleological explanation: when either has been admitted in explanation of anything, it has been made to explain everything. But as with the concepts of change and permanence, so with the two types of explanation, it seems to me to be possible to make use of each without excluding the other. It is part of my thesis that, while certain entities and activities can be adequately interpreted by their origin or their past, other activities can only be understood in relation to their goal. I have, for example, in Chapter V, sought to give an account of the significance of literature and poetry in terms of what I have called the *ab origine* explanation. They were not, I suggested, concerned with the revelation of a permanent world, nor was their value absolute and changeless; they were rather to be interpreted as the endeavour on the part of the Life Force to give conscious expression to its own instinctive purpose. They were to be understood, therefore, in terms of a thrust from behind to whose impulsion they gave expression, rather than as the response to the pull of a goal conceived in front. It was in terms of their origin and function in the past and not by reference to some ideal end that they sought to attain in the future, that the secret of their significance was to be sought.

It is, however, with the teleological type of explanation that I am more particularly concerned at the moment, in connexion with the answer I am trying to give to the question, why it is necessary to introduce objective value into the universe at all. If it can be shown that there are entities to which the teleological explanation alone is applicable, then we shall implicitly have established the

need for an element of perfection and permanence which fulfils the function of the τέλος.

No conclusive demonstration is possible here, if only because, as already pointed out, there is no type of entity of which the *ab origine* type of explanation has not seemed to many to give an adequate account. There are, nevertheless, certain spheres in which its application does undoubtedly seem both inappropriate and unsatisfactory. These spheres are pre-eminently those of mathematics, of ethics, and of aesthetics. Where art and morals are concerned, a knowledge of the origin of an entity affords us very little information about its present state and nature, just because, although it originated as an entity of a certain sort, it has developed into an entity of a different sort now. For example, to take an instance of Dr. Hastings Rashdall's, the fact (if it is a fact) that religion began as Totemism and Exogamy does not alter the fact that it is religion, that is to say, something completely different now, any more than the fact that the savage can only count on the fingers of one hand invalidates the multiplication table. Similarly the demonstration that the moral consciousness arose out of tribal fear and flattery does not necessarily mean that it is exclusively or even mainly composed of fear and flattery now. The whole doctrine of emergence insists, indeed, that there *may* be more in a thing's present state than there was in its ingredients or its origins. This is particularly the case with regard to an emergent product like the human mind. Thus to know that the embryo Einstein was once a fish, and that Einstein still possesses the rudiments of gills, tells us very little about the mind of Einstein now, a fact which suggests that Einstein's mind demands for its more complete and adequate explanation a reference to what the human mind is trying to become, in other words, to the more fully emerged minds of the future.

Perhaps the best instance of the inadequacy of the *ab origine* explanation in so far as it purports to give a complete account of the present nature and content of any phase of activity in the spheres I have mentioned is afforded by music. It is possible, as I said above, to explain the nature of our feeling for music on lines which lead in a precisely contrary direction to that followed in Chapter VI. A good example of what might be called the subjectivist interpretation, which is also the interpretation *ab origine*, of music is the theory of M. Ribot.[1] He finds the true origin of art in the play impulse, which is ranked with the purely instinctive elements in our psychology. 'This *X*' (i.e. the play impulse), he

[1] Ribot, *Psychology of the Emotions*, Chap. X.

writes, 'which for want of a better term we may call spontaneity, is of the nature of an instinct. It is a craving to create, equivalent in the intellectual order to the generative craving in the physiological order.' From this germ he traces the evolution of the play impulse, through dancing, which is muscular play, and ornament, which has a social value, to what he somewhat surprisingly calls the anthropomorphic stage where art is freed from the merely human reference, and man is enabled to derive aesthetic pleasure from music or natural scenery, until finally we arrive at the conception of 'Art for Art's sake'. Thus the pleasure we feel in a Bach Fugue is not derived from an apprehension of significant form, but is merely a complicated and highly elaborate version of the gratification of the play impulse of the savage.

As I pointed out in Chapter VI, it is not possible to refute a theory of this kind by logical argument; our criticism must confine itself to putting the questions: 'Is this an adequate account of the nature of our aesthetic experience as it is here and now? Granting for the sake of argument that the development of aesthetic pleasure from the gratification of a fundamental play impulse has been established, are we justified in seeing no more than the gratification of this impulse in our appreciation of, for example, Bach to-day? Is the developed product infected through and through by the characteristics of the germ from which it sprang, so that it contains and can contain no features of intrinsic importance which the germ did not?' To say that it does not contain such features is to deny the whole theory of emergent evolution which has been advocated in the first part of this book; to say that it does, is tantamount to admitting the existence in aesthetic experience of an element which cannot be accounted for on *ab origine* lines. That such an element does in fact exist in our appreciation of music has been the argument of Chapter VI. If that argument is one which can in the main be accepted—and for the purpose of the present discussion I must assume that it can—then the biological explanation of the appeal of music which, basing itself on the origin of aesthetic pleasure in the play impulse, regards it as in essence sensational must be rejected. If we do reject it, we may proceed to point out that just as in the complex emergent which is aesthetic feeling there is an element which was not present in the impulse from which it arose, so in that which, as Plato would say, is set over against aesthetic feeling as its object is there an element which defies analysis into its physical components. A major triad may be explained, so far as its origins are concerned, by a physical account of vibrations; but if you ask what are the value and the purpose of the sounding

together of the three tones that compose the triad, you can only say that they make a harmony which is different from the sum-by-addition of the three notes. It is in this harmony that aesthetic satisfaction is found, and aesthetic satisfaction, to return to the argument of Chapter VI, is to be interpreted as our feeling for the image or reflection of reality.

My conclusion is, then, that both in aesthetic feeling and in that which arouses it, there is an element that evades description in terms of the *ab origine* explanation; that both in the feeling and in that for which it is felt this element is embedded in material to which the *ab origine* explanation applies, and that the only way to do justice to this element is to regard it as a true emergent as it manifests itself in aesthetic feeling, and as a reflection or reproduction of reality as it appears in music. This is to insist on a teleological explanation for aesthetics, by interpreting aesthetic feeling as a recognition of the element of reality which is reproduced in music. It is with this same reality that I have identified the element of permanence and perfection in the universe, and have defined its complete and untrammelled apprehension as in some sense the end of evolution. The appreciation of beauty in music is, therefore, on this view, one of the ways in which, in obtaining a glimpse of reality, we obtain likewise a foreknowledge of the nature of life's future apprehension of it.

In general we may say that all those activities which are concerned with morals, with aesthetics, and with religion or rather with the mystical aspect of it, that is to say, with those departments of the universe which derive significance from the fact that they embody an element of value derived from reality, are susceptible of a teleological rather than of an *ab origine* explanation. Those activities, on the other hand, which appear to be more directly concerned with the maintenance of life at its existing level and its advance beyond it, are most fruitfully to be interpreted on *ab origine* lines.

The question of the point at which the *ab origine* explanation of human activity tends to be superseded by the teleological one, which is at present in the main applicable only to the experiences of the mystic, the good man, and the artist, is a difficult one into which I cannot here enter. No clear-cut line of demarcation can be drawn. While certain human activities such as those connected with the creation and preservation of life are clearly to be ranked as *ab origine* in respect of the type of explanation most appropriate to them, and others such as the experiences of mystics are clearly teleological, there are a number of intermediate experiences which

may be regarded from either point of view. For example, the apprehension of value, when achieved, must of necessity carry the individual consciousness that achieves it above the normally existing level of vital emergence. A picture, for instance, which seeks to reproduce the artist's vision of the forms of reality, by embodying a higher beauty and a higher significance than have yet been perceived, succeeds after a brief struggle with its strangeness in adding a fresh extension of sense to the heritage of the race, so that men's minds become enriched by a new power of appreciation, and sharpened by a new faculty of perception. Deriving its inspiration, that is to say, from the artist's vision of reality, and thereby proclaiming itself teleological in character, the great picture produces at the same time effects upon the mind of the race, effects which, by manifesting themselves in an added fineness of perception, belong to the type of occurrences which I have endeavoured to explain in terms of the effort of the Life Force to transcend itself by emerging at higher levels. In other words, while the significance of the picture is teleological, the response which the ordinary man makes to it lends itself more appropriately to the *ab origine* type of explanation. On the other hand, it will sometimes be found that two experiences or activities which clearly resemble one another in regard to many of their characteristics, nevertheless exhibit marks of differentiation of such a kind that, while one falls naturally to be interpreted in terms of the *ab origine* principle, the other seems insistently to demand the operation of the teleological. This latter type of experience or activity will, as I have suggested, always be found to be concerned with the apprehension of reality, whether through the ethical, the aesthetic, or the religious mode of approach. I will take as an example of two superficially analogous activities, which nevertheless testify to the operation of different principles, an instance cited by the late Mr. Clutton Brock,[1] of the burning down of a town hall by an infuriated mob and the playing of an orchestra. Both these activities are spontaneous; both are undertaken by human beings acting in concert; both yield feelings of delight and instinctive satisfaction; and the feelings are enhanced in each case by the fact that a number of individuals share them. The town hall burning obviously belongs to the type of activity which sociologists are accustomed to describe in terms of mass emotion generated by what is called the herd instinct: the mob is carried away by a wave of feeling which impels it from behind, urging it resistlessly and

[1] In lectures on 'Psychology of Fellowship' delivered at Manchester College, Oxford, 1921, but not, I believe, subsequently published.

unwittingly forward. The orchestra playing is an activity involving other elements, which must be accounted for on different lines. Unlike the mob, the orchestra pursues an end consciously conceived and deliberately willed. This end, namely, the realization and the embodiment in a physical medium of the piece of music performed, is something which lies outside and beyond the activity which is involved in its pursuit; although, therefore, the activity undoubtedly gives pleasure, the pleasure is merely an incidental adjunct to a process of which the justification must stand or fall by its ability to realize the end. In the pursuit of the end each member of the orchestra voluntarily submits himself to discipline and restraint which are exercised by the conductor. The activity of the mob exhibits none of these characteristics; it is neither planned nor willed; no end of value is aimed at, and no satisfaction is sought in the realization of that end. The pleasure of the sacking of the hall is derived not from conscious co-operation in the pursuit of an end envisaged ahead and regarded as valuable, but from the release of repressed emotions, that is, from the liberation of forces which exert pressure from behind. It is the activity itself which is valued, not the end which the activity seeks to achieve. Again, the mob is without discipline or direction, and instead of consciously subordinating itself to authority, is unconscious of the force that dominates it. A final distinction is that, while the individuality of the member of the mob is merged in the mass emotion by which he is moved, so that he feels and acts not as an individual but as a unit, being carried by the mob as a bubble is carried by a stream, the individuality of the player engaged in the co-operative activity of the orchestra is not lost but heightened. The clarinet player will make and find his clarinetting a more significant thing, because it forms part of a larger whole which is engaged in the realization of an end of greater value than would have been the case had he merely been called upon to play a solo. It is for this reason that the pianist playing a concerto has a fuller opportunity for self-expression and is moved by a more intense emotion than the soloist playing a Chopin Ballade or a Beethoven Sonata, and it is for the same reason that the audience take more pleasure in the playing of an orchestra than in the rendering of the same piece by even the most polyphonous organ.

I suggest, then, that the co-operative activities of individuals may be of two kinds: there are those which are inspired by an overmastering force from behind, expressing itself in identical individual impulses, and those which take place in response to the

pull of an object of value which the activity in question seeks to embody in the world of sensory experience.[1] I am further suggesting that co-operative activities which on their initial appearance fall within the first category, i.e. belong to the town-hall-burning type, may come in the course of evolutionary development to approximate more and more closely to the second. Men first act together as the result of 'herd instinct'; but their co-operative activities may alter their character, and emerge at a level at which they can only be fully accounted for on the assumption that their significance is, now at least in part, teleological.

I am of course well aware that this interpretation of the phenomenon of conscious desire for ends which are conceived to be valuable is by no means a necessary one; that it is possible to assign to desires of all kinds an explanation in terms of behaviour designed to allay a conscious or unconscious need, and to hold that the attribution of a consciously conceived 'object of desire' to the series of activities which were prompted by the need is a piece of later rationalization for which no warrant can be found in our actual psychological history. When the need which prompted the activities is allayed, a state of quiescence may be said to ensue, and following out the implications of this view, psychologists have contended that the state of quiescence, or the situation in which it occurs, is then falsely asserted to be the original object of the desire, the starting-point of the whole process.[2] I recognize the force of this kind of analysis, and, in so far as it attributes human activity to the operation of a push from behind, expressing itself in a series of instinctive needs, of which we can give absolutely no rational account whatsoever, it is perfectly consistent with the vitalist hypothesis put forward in Part I. It is, indeed, so far as what I have called activities explicable *ab origine* are concerned, the account of so-called conscious desire that I should be inclined to adopt, and I have endeavoured to give it a novel illustration by the concept of the unconscious, of its *raison d'être* and mode of operation suggested in the early part of Chapter V.[3] The point which I here wish to emphasize is that applicable as it is to some kinds of desire, it is by no means applicable to all. It is not possible to overlook the fact that there is a real distinction between activities of the town-hall-burning type and those of the orchestra-playing type. That this distinction

[1] I am, of course, speaking loosely here. The effect of the playing of a piece of music of the highest class is to arrange the physical material of sound in an order which reflects the patterns of reality.

[2] See for a statement of this view, Bertrand Russell, *The Analysis of Mind*, Lecture III, especially pp. 66–8.

[3] See Chap. V, pp. 219, 220.

is extremely difficult to define is unfortunately true, but its existence is undeniable, and to extend the account of desire in terms of unconscious need to explain all forms of human activity is in effect to ignore it.

The attractiveness of the endeavour to account for all forms of desire on *ab origine* lines lies not only in the principle of economy of interpretation, but also in the fact that the co-operative activity of orchestra playing may be shown to have developed by more or less continuous stages from activities of the town-hall-burning type. It is urged, therefore, that exhaustive analysis can show no factor in the orchestra playing which was not equally present in the town hall burning, the consequence being that any explanation which is adequate to the one is adequate also to the other. It may be so, but if it is so, then the whole doctrine of emergence goes by the board. For the doctrine of emergence is just as unmistakably implied by the statement that an emerged entity A can only be adequately explained in terms of X, X being a form of explanation inapplicable to the constituents of A which are B and C, as it is by the statement that the emerged entity A possesses qualities or contains factors not present in the constituents B and C; it is, indeed, in the long run because of the possession of such new qualities or factors by A that a new type of explanation is required when we seek to give an account of it. Hence those who deny the necessity for postulating *a new form of interpretation* for the emerged product are in effect denying that the product is an emergent.

I do not wish at this stage and on this particular issue to recapitulate the considerations upon which the doctrine of emergence is based; it is sufficient to point out that it is the doctrine itself, with all that it implies, which is here in question. If it is a doctrine to which on other grounds we find ourselves on the whole able to subscribe, then we shall see no difficulty in postulating for one form of human activity and experience the necessity for a type of explanation which is admittedly inapplicable to another, even when the first activity may be shown to have evolved by more or less continuous stages out of the second. The type of explanation in question is one which involves the assumption that reality exists and possesses value independently of our apprehension of it, and that the apprehension of reality is the goal of the movement of evolution, which seeks progressively to deepen and enlarge its awareness of that which it at present imperfectly apprehends. In admitting the necessity for a reality conceived as objective value, I am at the same time asserting the impracticability of attempting

to account for the universe solely in terms of the principle of change.

III. THE NATURE OF VALUE.

Hitherto I have been concerned to establish the necessity not only for change but also for permanence in the universe; it remains to say something of the nature of the permanent element thus affirmed. That it is in some sense apprehended in moral and aesthetic experience, that it is recognized as possessing value and conferring significance upon the experience which apprehends it, are conclusions which have emerged from the discussions of the two preceding chapters. The mode of its apprehension by life and the nature of the conditions attendant upon such apprehension will be discussed in the final chapter. Before, however, proceeding to this more detailed treatment I wish to devote the concluding pages of this chapter to a discussion of the assumption made in the preceding pages with regard to the pre-requisite of value, that which is in my view the indispensable condition of there being value at all.

The pre-requisite in question is that a thing which is recognized as being valuable should be outside and independent of the process which recognizes it as such. I propose to take as the text of this discussion one of Wittgenstein's propositions which is as follows: 'In the world everything is as it is and happens as it does happen. *In* it there is no value—and if there were, it would be of no value.'[1] With the reservation that 'the world' must be taken to mean the world of sensory experience, that is, on my dualistic analysis, the world of life and the world of matter, this proposition admirably expresses the view which I wish to advocate. A preliminary statement of this view has already been given in the early part of Chapter II, where I affirmed that value could not, without being destroyed in the process, be represented as a creation or expression of the human mind, or as owing its character as value to the fact that the human mind apprehends it; reality, I urged, was only of such a kind as to command our respect if it was discovered to be so independently of our own feelings towards it. What I have now to say is little more than an elaboration of this view, in the light of the conclusions at which I have arrived in regard to ethics and aesthetics.

1. *Criticism of subjective theories of value.*

The tendency to make value dependent upon mind has its origin in the earlier forms which Idealism has historically assumed, and

[1] Wittgenstein, *Tractatus Logico-Philosophicus*, Prop. 6. 41 (p. 183).

it has remained one of the outstanding characteristics of idealist systems ever since. It follows inevitably from the seventeenth-century relegation of secondary qualities to the realm of mental existents. According to Descartes and to Locke, bodies are perceived with qualities which do not in fact belong to them, these qualities being sensations projected into the external world by the mind. Thus nature gets credit which should in truth be reserved for ourselves; the rose for its scent, the nightingale for its song, the sun for his radiance. As Professor Whitehead puts it: 'The poets', on this view, 'are entirely mistaken. They should address their lyrics to themselves, and should turn them into odes of self-congratulation on the excellency of the human mind. Nature is a dull affair, soundless, scentless, colourless; merely the hurrying of material, endlessly, meaninglessly.'[1] Later Idealism modifies this position in two ways: it applies to the primary qualities the same analysis as that which Descartes and Locke applied to the secondary, and it restores or endeavours to restore objectivity to both by exhibiting them not as characteristics of our own individual sensations, but as aspects of an independent, universal mind of which individual minds are partial and incomplete manifestations. But Idealism could not long rest in this position. The universal mind not being experienced by any mind, contradicts the fundamental tenet of Idealism that whatever exists, exists only in virtue of its being experienced, so that with the twentieth century we find the universal, objective mind, which is not anybody's mind, falling into the background and being replaced by a universe of experiencing subjects. This is the position in which Croce and Gentile come to rest, affirming that experience alone is real, and that the universe as it exists here and now is the expression of the sum total of the creative thinking acts of individual minds.

It follows that if there is such a thing as value, it must, in common with everything else, be the product of creative thinking not discovered but projected by the free self-determining activity of mind, which is author at once of its own world and of itself.[2] For Croce and Gentile nothing is real but Spirit, and Spirit is naught but the process without beginning and without end of its own absolute self-creation. Nothing, therefore, is but thinking makes it so in the act of its own self-formation. Spirit or mind is thus the author of all forms, degrees, grades, or stages of being, and, being conceived on the model of self-consciousness, must posit itself as object and concurrently as subject while it still remains one with

[1] Whitehead, *Science and the Modern World*, Chap. III, p. 69.
[2] Cp. Gentile, *Teoria generale dello Spirito come Atto Puro*, p. 214.

itself. Value, then, in so far as it is apprehended as an object, is merely the postulation by mind as subject of mind as object.[1] When, in other words, we value something, we are merely paying a compliment to the provisional externalizations of our own minds.

Of this position, in so far as it is advanced on general grounds, I have already suggested certain criticisms in earlier chapters; here I am concerned merely with its ability to give an adequate account of value. No logical disproof is possible. I can only comment upon what I cannot help regarding as the triviality of a doctrine which makes the conscious faculty or capacity of thinking individuals the source of all the richness of the world we know, of all the variety of nature and of history. Mr. Bosanquet seems to me to have convincingly exposed in his book, *The Meeting of Extremes in Contemporary Philosophy*,[2] the 'narrow basis of humanism', to use his own words, upon which the neo-idealist theory rests and I do not wish to repeat his strictures here,' especially as my own criticism of this attitude proceeds from a more radically opposed standpoint even than that of Bosanquet. This standpoint, presupposing as it does a fundamentally different conception of the position of mind in the universe, seems to me in preserving the independent status of the real to enhance the dignity of the mind that knows it.

Before proceeding further it will be as well briefly to indicate the nature of this different conception upon which my doctrine of value depends. Our mental picture of the world is, as I conceive it, a simple and limited affair; it is indeed precisely because of its simplicity, because of all that it leaves out, that it is valuable to us. Were we to be aware of all that is, we could as little understand as Hamlet could act. We simplify because of the limited character of our awareness, knowing at every stage of evolution as much of the universe as our abilities can cope with. As was said before, we do not bite off more reality than we can chew. Year by year, as our knowledge of the universe increases, our world pictures become more complicated. We note more details, and details of a different kind, which naturally affect our view of the world as a whole, and so help to model our philosophy. The mind of man develops and grows more subtle because each generation unconsciously inherits and is brought up consciously to realize a more elaborate picture of the world than its predecessor. We think, we also feel, more subtly and multifariously than our forefathers, simply because we

[1] Cp. Gentile, *La Riforma della Dialettica Hegeliana*, p. 237; *Teoria generale dello Spirito come Atto Puro*, p. 214; Croce, *Filosofia della Pratica*, p. 180.
[2] pp. 55, 61, 62, and 163, 164.

know more than they knew. A complete understanding of the universe will be attained when mind knows all that reality contains, with the result that our own world picture becomes as rich and complicated as its original, a perfect transcript of reality. This, in brief, is a sketch of the realist attitude which runs through all the philosophizing of this book; it is an attitude which, in its refusal to see in mind more than a knower of a universe which stands outside it, seems to me to escape the narrow humanism of the neo-idealist conception.

With these preliminary remarks I proceed to more detailed criticism of this 'narrow humanism' which in my view is common to neo-idealist and vitalist systems alike. The claim of these systems to afford an adequate philosophy of life may be impugned on two distinct grounds. In the first place, by divesting the universe of non-human elements they expose themselves in a quite peculiar degree to the charge of being systematic rationalizations of instinctive wishes, undertaken with the object of magnifying the importance of the human spirit and assuring humanity of the spiritual kinship of the universe. It may, that is to say, be convincingly urged that mind in conceiving all Reality after the fashion of its own inward nature and activity, is merely projecting itself outwards upon all other forms of being. For example, the neo-idealist notion of progress, since it owns no goal to which the progress can approximate, ought to be called, not progress, but merely amelioration.

In order to define more clearly the nature of the objection which I am here bringing against philosophies of this type, an objection which applies, although in a lesser degree, to the older Idealism as to the new, I shall make use of a term, 'The Critique of Satisfaction', invented by the late Mr. T. E. Hulme. In his posthumously published work, *Speculations*, Mr. Hulme points out that the great majority of the philosophies which have appeared since the Renaissance, however they may differ on other points—and admittedly they do differ enormously—nevertheless closely resemble each other in one respect. Diverse as are the pictures of the universe which these philosophies present to us, they are all *satisfactory, and satisfactory in the same way*; that is to say, their conceptions of man's relation to the world all conform to the same standards or canons of what is satisfying.[1] It is in the similarity of these canons that the unity of most post-Renaissance philosophy is to be found. The canons of satisfaction which determine the final picture of the world in which the philosophy issues are

[1] See Hulme, *Speculations*, pp. 12–16.

unconscious; they represent, that is to say, an instinctive view of what is a *satisfactory* destiny for man, which is the unconscious intellectual heritage of most modern thinkers. Hence, though the *truth* of any particular philosophy may be questioned by a rival school, its conception of what is satisfactory is tacitly agreed to. This unconscious canon of satisfaction receives its most concise formulation in Goethe's famous answer to Eckermann's remark that human thought and action seems to repeat itself by going round in a circle. 'No, it is not a circle; it is a spiral', said Goethe. This, as Mr. Hulme comments, is to 'disguise the wheel by making it run up an inclined plane';[1] and, since the ascent affirmed is limitless and is yet an ascent to nothing, it is tantamount to regarding perfection as expressible in terms of the ascent itself, that is, in terms of the advance of human nature. Notable modern expressions of the same doctrine are Croce's mystery of the infinite progress and infinite perfectibility of man, and Professor Alexander's conception of deity as a perpetually unrealized quality of the evolutionary process of which we ourselves form part.

The contention that I wish to put forward is that this unconscious identification of perfection with human perfectibility springs from precisely that failure to recognize the gap of discontinuity between the human and the vital on the one hand, and the world of absolute values on the other, of which I have already spoken. We introduce into human things the perfection which properly belongs to the world of reality, and so confuse human things, and more particularly human thought, with the objects upon which it should be directed. As it is only too obvious that no human thing here and now *is* perfect, we naturally tend to place perfection at some distance, preferably infinite, along the road which we are following. This is the essence of Romanticism in literature, of Naturalism in ethics, and of Utopianism in the social sciences. In literature we envisage an impossible perfection in the ultimate development of love between the sexes; in ethics we conceive the possibility of the immediate or gradual achievement of perfection by the abolition of disciplines and restraints; and in the social sciences by the removal of certain specific inequalities and abuses.

It would be interesting in this connexion to enumerate the nineteenth-century writers who, following Rousseau, have taught that man is by nature good, and that it is only the influence of bad laws and customs that makes him appear evil; remove these, they have said, and man, the reservoir of infinite possibilities, will in his own being achieve perfection. Hence, as civilization advances,

[1] Ibid., p. 35.

we find a growing insistence on the importance of self-development and self-expression. Beginning in the sixteenth and seventeenth centuries in an unusual interest in human personality which finds expression in autobiographies and diaries, achieving a new intensity in the nineteenth in the popularity of the novel, the emphasis upon the self culminates in the twentieth in the cult of the unconscious, proclaiming as its watchword the liberation of the *libido* which is characteristic of psycho-analysis and the new psychology. Cultivate the self in the right way and the self is capable of achieving the highest, is the underlying *motif* that runs through these developments. Thus perfection, which is, rightly considered, an absolute non-human value, is conceived to lie upon the plane of possible or even of inevitable human development.

Now this attitude is one which in my view destroys value by appropriating it for humanity. It obscures the significance of the emotions we feel for ethics and for art, and renders us incapable of understanding the unique character of religious feeling. Summing up this unconscious attitude to life and value which determines what I have called the canons of satisfaction, I should say that it expresses itself in,

(i) A disbelief in non-human absolute value.

(ii) A transference of value to life and in particular to human beings as the highest manifestation of life.

(iii) A consequent belief in the perfectibility of man and disbelief in the objective character of evil.

(iv) An ethical ideal which aims at the removal of all restraints and checks upon the spontaneous growth of personality.

(v) A belief that mind ('mind' resolving itself, though not ostensibly, into human mind) is the reality of the universe, and that whatever is real is mental. It is significant in this connexion that Idealism is the typical post-Renaissance philosophy.

Against philosophies which unconsciously assume the positions here set out, I urge that, in presenting us with a picture of the universe which is judged satisfying because it embodies what the positions assert, they expose themselves in a special and peculiar degree to the charge of being rationalizations of subjective inclination, rather than statements of the nature of the real.

2. *Theory of value as objective.*

The second consideration which I wish to advance against philosophies which deny the external non-mental character of value, amounts in effect to a statement of what may be called the alterna-

tive position. In favour of this position I shall contend that, unlike the view just criticized, it makes adequate allowance for the unique character of our feelings for art, ethics, and religion, which the popular contemporary view seems to me to obscure. It involves, that is to say, a belief in the objective status and peculiar significance of the concepts of beauty, goodness, and truth.

This alternative position rests equally with the first on certain instinctive presuppositions about the nature of the universe and the status and destiny of human life within it, which at one time formed part of the unconscious intellectual make-up of the average man, in just the same way as the contrary presuppositions dominate him to-day. The presuppositions in question are an implicit belief in the subordination of the individual to certain absolute values, and the consequent view of him as essentially unimportant and imperfect. Roughly speaking, these presuppositions may be said to have dominated the Middle Ages and to have disappeared at the Renaissance; there are some signs of their recrudescence to-day.

They express themselves in the explicit beliefs—

(i) That the values of ethics, art, and religion are absolute, and essentially inexpressible in the relative categories of life.

(ii) That man is essentially imperfect and that the element of imperfection can never be eradicated. That, as a consequence, human beings should not be allowed free and unrestrained expression, but should rather be disciplined by ethics and knowledge.

(iii) That perfection, being non-human and absolute, the only relation that human beings can have to it is the relation which is involved in their apprehension of it. They cannot realize it in their own being, but they can come to know it as something other than themselves.

It will be worth while to illustrate this general attitude to value by indicating the metaphysical conclusions in regard to art, to ethics, to truth, and to mysticism in which it finds expression. As these are the conclusions which I have myself tried to maintain, it will not be necessary to do more than recapitulate some of the main positions which have been reached in the preceding pages.

In art I have emphasized the objective non-human character of beauty. I have suggested that the forms which appear in a piece of music or a picture for which we feel aesthetic emotion, are derived from the world of reality. Hence the success of a work of art depends upon the ability of the artist to embody in a sensory material something of the nature of the world of reality which he has apprehended in virtue of his special gift of vision. It follows

first, that the value of art has no relation to and is not dependent on the events of this world, nor is the peculiar emotion that we feel for art akin to any of the emotions which are aroused in us by things human or earthly; secondly, that since the significance of art is not derived from, and does not depend upon what is human, art is to be judged neither by its ability to represent visible forms nor by its so-called human appeal.

Since beauty from which art derives its significance, is a form of value, it is clear that a right attitude to art will depend upon a right attitude to value. Now I have suggested above that, since the Renaissance, man has in general falsely conceived the nature of value, degrading it by an identification with the human spirit or, rather, with the ultimate expression of the human spirit. Granting this supposition we shall expect to find that artists since the Renaissance have misconceived what I have suggested to be the proper function of pictorial art, by tending to regard the ability of a picture to represent something, that is to say some living or natural object, as the criterion of its merit. It will also follow that, if I am right in regarding the pre-Renaissance world as animated by a different conception of value, pre-Renaissance pictorial art will embody a different conception of what a picture should be.

And this is precisely the broad generic difference that we do find. The subject is too large to be pursued here, and I have not the technical knowledge to do more than repeat the opinions of those who are competent to speak upon it. From them I understand that the broad difference between pre- and post-Renaissance pictorial art may be described by saying, that while post-Renaissance art is a 'vital' art in that it takes and endeavours to communicate a delight in human and natural forms, pre-Renaissance art is the exact contrary to this. There is, for example, in Byzantine pictures and mosaics no figure or shape that is either natural or vital, nor is the pleasure we obtain from them a pleasure in the reproduction of natural objects or of human figures. There is rather a neglect of the appearances of things and a preoccupation with the formal qualities of lines and shapes. There is, further, a definite impatience with whatever in the appearance of living organisms and of natural objects fails to exhibit such lines and shapes in the purity of their abstract form. This impatience is the expression of a fundamental indifference to the trivial and accidental characteristics of living matter, and a searching after an austerity, a rigidity, a *perfection* which vital things can never have. We cannot suppose that the mason who carved the face of an archaic figure did not possess the skill to separate the arms and

legs from the body, or that the conventional forms of Egyptian monumental sculpture spring from an incapacity to represent real ones. We can only conclude that these deficiencies in realism reflect a particular kind of interest, and that in Egyptian, Indian, and Byzantine art, where everything tends to be hard and geometrical, the representation of the human body is often distorted to fit into a framework of stiff lines and cubical shapes, because the artist was interested in the human body not for its own sake, but only in so far as it exemplifies lines and shapes. Man in short is subordinated in pre-Renaissance art to certain non-human absolute values; his form is never presented intact, but distorted and mutilated in order that it may be made to fit into certain abstract patterns which arouse aesthetic emotion. This attitude to natural objects springs in my view from a right conception of art, since the function of art, as I have tried to show in Chapter VI, is not to mirror life or nature, but to quicken the mind to an apprehension of the beauty which belongs to the real world of absolute values.

The metaphysical significance of art consists, then, in the part which aesthetics play in the general process of adjustment which is always going on between man and the world of value. If in that process man feels himself to be at a different level from the world of value, art will use the world of sense as a mere instrument through which to represent value; hence it will show the tendency to abstraction characteristic of pre-Renaissance art. If there is conceived to be that kind of harmony between man and the world, which springs from a conception of man as being on the plane of value itself (or rather of value as on the plane of man), art will concentrate on the forms of the sensible world and become materialistic in character.

In ethics my position has been that moral values are objective and our apprehension of them intuitive and irrational. Goodness, I have affirmed, is objective in the sense that its nature does not depend upon the conceptions which any mind, or body of minds, forms or has formed in regard to it; our feeling for it is irrational in the sense that, if goodness can be interpreted or explained in terms either of its causes or its effects, it fails to arouse the feeling. The habit of acting rightly is not, I have urged, adequately to be explained on naturalistic lines by pointing to the considerations of tribal welfare in which it may have originated, still less on utilitarian lines by indicating the advantages which attend the performance of right actions. What is true of right conduct is true of our feeling for right conduct, that is of moral approval. The

nature of the moral consciousness points in fact to a non-human, absolute value, the apprehension of which emerges at a comparatively late stage of evolution. Goodness is not, therefore, to be identified with human perfectibility, nor is it to be anthropomorphically conceived in terms of human advantage. The numerous attempts which have been made so to conceive it, attempts which show only too patently how changes in the conception of morality follow changes in human need and desire, are all indictable at the bar of the Critique of Satisfaction on the charge of being mere rationalizations of human desires.

I have endeavoured to guarantee the objectivity of the concept of truth, by the theory of subsistent objects. To regard concepts as mental is, in my view, tantamount to making truth dependent upon the human mind. Most theories of knowledge arrive at this result through regarding the laws of logic as laws of human thinking, which, if concepts be mental, they must necessarily be. Philosophers who hold this view are immediately faced with the question, why should the laws of human thought conform to the laws of the behaviour of things, and if they do, how can it be known that they do? Faced with the gulf thus established between thought and objects of thought, most systems have bridged it by impugning the externality of thought's objects. The laws of thought must, they have said, of necessity be the laws of things since things are the creatures of thought; if there were two worlds, one of thought and one of things, we cannot see how they could ever be brought together, or why the laws of the one should apply to the inhabitants of the other; therefore there are not two worlds but one world, and the objects of thought are amenable to its laws since they are merely such as thought has made. This is anthropomorphism with a vengeance, an extreme form of that tendency to make the human mind the arbiter alike of reality and of value, against which I have been protesting. If we wish to escape such anthropomorphism, our only course is to hold that the laws of logic are not laws of thought at all, but laws of the behaviour of things which mind discovers in the course of its activity of being directly aware of the external universe. It follows that the objects of thought which mind discovers are not affected by being thought about. The way is now open to a non-anthropomorphic theory of truth.

If the content of a proposition, or any part of it, is mental, then the truth of the proposition is, at any rate in part, a mental characteristic. To avoid this conclusion it is necessary to limit the function of the mind, in thought as well as in perception, to

simple awareness, and to regard the world of thought as formed of subsistent objects which must not be regarded as abstractions either from things or from ideas. These subsistent objects form the content of propositions: 'A proposition', to quote Professor G. E. Moore again 'is composed not of words nor yet of thoughts, but of concepts';[1] it contains, that is to say, non-human entities which constitute the world of thought. The question whether a proposition is true or not will thus depend upon whether the relationship asserted between the objects of thought, which form the content of the proposition, holds between their counterparts in the world of physical existents.

I have been careful to claim that the nature and extent of what actually exists, what I have called the element of geography in the universe, which is, from another point of view, the sum total of the physical counterparts of objects of thought, constitute an arbitrary and irrational fact. So far is this fact from being a mental creation that no amount of reasoning by mind can even tell us how many and of what kind physical existents are. Like the objects of thought they are discovered by acts of awareness, which do not, however, contribute to their character. The relationship between the physical counterparts of objects of thought, upon the nature of which the truth or falsehood of a proposition containing the objects of thought in question depends, is itself an arbitrary fact which is also a non-mental object of thought.

It is along these lines that, in my view, logic can be purified of anthropomorphism, and truth, emancipated from the limitations imposed by the necessity of conforming to the requirements of human thinking, can be defined in non-mental terms.

3. *The testimony of the Mystics.*

Finally there is the role of the mystic. I propose in the next chapter to deal with the status and significance of mysticism in more detail, and to indicate the position which mysticism assumes in the system of philosophy advocated in this book. My object in mentioning it here is merely to complete the list of those experiences and activities which require us to postulate for their adequate comprehension an element of objective value which is external to mind, by a reference to the kind of experience which above all others seems most insistently to demand it.

The subject of mysticism is one upon which I speak with the greatest diffidence; my own experience in that direction has been of the weakest and most limited character, and is certainly not

[1] Moore, 'The Nature of Judgment', *Mind*, vol. viii, N.S., p. 79.

in itself of a kind to justify me in undertaking a rebuttal of the criticism of mysticism so common to-day, which exhibits it as the most vivid of our subjective experiences, differing in degree but not in kind from the states of exaltation produced by the inhalation of nitrous dioxide gas, and like them possessing no objective significance.

Into the controversy which besets this question I shall not here enter. I propose simply to take the experiences of the great mystics at their face value, and to inquire whether they do not postulate the existence of an object of contemplation upon which the mystical experience is directed and from which it derives its significance, but with which the experience is in no sense identified or merged.

Of the classical definitions of mysticism that of Dr. Rufus Jones most nearly expresses this point of view. 'Mysticism', he says, 'is that type of religion which puts the emphasis on immediate awareness of relation with God, or direct and immediate consciousness of the divine presence.' As this is not a theological work, I shall not comment upon the assertion that the object of the mystic's awareness is God; I am concerned only with that part of the quotation which affirms a separateness between the mystical state which is regarded as one of apprehension and the object apprehended. It is upon this separateness that the great mystics seem to insist again and again. The mystical experience is not one in which they are somehow merged with the object of their quest; it is a state of illumination in which they are enabled to apprehend clearly and directly an object which remains nevertheless aloof, unaffected by their apprehension. 'Whoso loves God, must not expect to be loved by Him in return', said Spinoza. It is thus, according to authoritative interpretation, that Plotinus conceived of the relation between the mystical vision and its object. 'Though man may love God,' says Dr. Bigg expounding Plotinus's doctrine, 'God cannot love man. Religion is the desire for the star. Man may reach the star and cannot be happy until he does; but the star does not know anything about him, and does not care whether he reaches it or not.'

It is in the philosophy of Baron von Hügel, perhaps the greatest of the modern mystics, that the conception of a necessary separateness between mind and reality finds its clearest and most definite expression. Baron von Hügel urges again and again the danger of slurring the distinction between thought and its object. It was his deliberately expressed opinion that religion had no more deadly or subtle enemy than Monism. Because it sought to transcend this

distinction Monism reduced itself, in his view, to a variety of Pantheism in which the element of value in the universe, instead of being kept pure and undefiled in unapproachable isolation, was made continuous with and thereby infected by the particularities and imperfections of human thinking. God, in short, in impregnating the activity which was the apprehension of God, became in His turn impregnated by it. A God so conceived could never, in von Hügel's view, evoke the true religious feeling, could never satisfy the hunger of the soul.

Thus in a passage in the Second Series of his *Essays and Addresses on the Philosophy of Religion*,[1] after describing God as supreme Goodness, Love, and Joy, he proceeds:

> All this Goodness and Joy God does not become, does not acquire. He simply *is* it. We will be watchful against the blurring over of the contrast between ourself, as experienced by us, and other contingent things always experienced by us at the time; these things and we are not identical, never were and never will be. How much more, then, will we be on our guard against any real blurring of the contrast between God and ourselves. His Otherness is as essential a part of the facts and of the power of religion as His Likeness can ever be.

Religion is here presented as at once the expression and the satisfaction of the soul's thirst for reality, the point of von Hügel's declaration being that it is only on the assumption that this reality is better because other than ourselves, that the *power* of the religious feeling can be explained.

> Religion [he continues] presupposes and reveals man as inevitably moved by and in travail with the sense of and thirst after truth, *the* truth, reality, *the* Reality. Man cannot renounce this sense and thirst as an illusion; the very dignity and passion that accompany or foster, at any time, his declaration of such illusion, ever imply such ontology—that there somehow exists a more than merely human truth and reality, and that man somehow really experiences it.[2]

It is of the essence of this doctrine that the reality which man experiences in moments of mystical illumination is not only otherworldly, but is unaffected by the travailing of this world. It is for this reason that von Hügel pronounces so strongly against the current modern view that ascribes to God a share in the world's pain. God is above pain, simply because He is above and other than the whole process which in travail and suffering seeks to approach and to apprehend Him. He may be in a sense responsible for the goodness of the world, in the sense, that is, in which He

[1] Chap. VII, p. 209.
[2] Von Hügel, *Essays and Addresses on the Philosophy of Religion* (Second Series), Chap. III, p. 59.

may be said to evoke and condition an awareness of Himself; but in no sense can we make Him responsible for its evil.

The distinction that I have tried to maintain between our apprehension of the world of value, howsoever conceived, and the reality of the world apprehended seems, then, to be one of the fundamental presuppositions of mysticism. 'Nothing could be more devastating to the mystic', writes Dean Inge, 'than to be persuaded that his own mind is the creator of the vision of Truth, Goodness, and Beauty which draws him upward. *Ascende per te ipsum supra te ipsum*, is the call which he hears.' This is not to deny that the mystic is affected by the object of his vision. On the contrary the vision is regarded by him as a gift from above which transforms and irradiates his personality; he is a doubly changed man, changed in that the vision of the real is vouchsafed to him, who before knew it not, and changed yet further by the knowledge of the real which his vision brings. But these changes are never of such a kind as to evade description in terms of the direct awareness with which I have identified all mental activity; they still reveal themselves on analysis as changes in the scope of awareness; they consist, that is to say, in a capacity to be aware of a reality which has previously escaped notice because it has been beyond comprehension. They conform, moreover, to the general mode of evolutionary advance previously described, in that the new level of awareness is attained as it were by a jump. As Plato describes the process of becoming aware of reality in the *Symposium*, there is a preparatory stage followed by a sudden illumination. The preparatory stage consists in a training in the precise studies of logic and mathematics, a discipline, as Plato puts it, in the exact arts of weighing, counting, and measuring, by means of which the soul is elevated to a point at which it is prepared for a vision of a new type. The vision itself takes the form of a sudden awareness (the lover, we are told, ἐξαίφνης κατόψεται)[1] which, though dependent upon, is logically distinct from and discontinuous with the preparatory stages which have led up to it.

The capacity for mystical vision, then, involves an increase in awareness of the same kind as that which is involved in any other evolutionary advance, and the individual endowed with it may be regarded as an evolutionary 'sport' in respect of the increased awareness which it implies. It is probable that the mystic who has once achieved the level of awareness at which he has 'seen' reality, is endowed with a yet further increase of vision, in virtue of which he will be permitted to see more

[1] Plato, *Symposium*, 210.

and to see more frequently. It may even be that by training and discipline he can command in some measure the moments of his vision. It is in this sense that I interpret the testimony of many mystics, that by the vision of God their personalities have been transformed. But although the relation of the mystic to the object of his vision may be one that profoundly changes the former, there is nowhere a suggestion that it affects the latter. The Spirit, the Indwelling Christ, or, more simply, the Reality with which the mystic communes, is a Power quite independent of himself and in no sense whatever the product of his own mental activity. The soul of man may be *capax deitatis*, but only if the capacity be one of discovery. To claim more for man, to claim for him the power of self-identification with reality, or to suggest that he can in his own person achieve the perfection which he dimly apprehends, is by implication to deprive reality of that very element which he finds worshipful, or so to degrade it that it ceases to deserve worship.

It is for this reason that those who have attained to any comprehension of the nature of the religious spirit, a comprehension achieved either through direct experience or through a sympathetic understanding born of love, reject with dismay the tendency to regard perfection as being within the bounds of man's realization. It is for this reason that they disavow so vigorously the evolutionary and vitalist theories of to-day, as infected with a shallow optimism born of an inveterately anthropomorphic approach to reality, which fails completely to make provision for the unique character of religious feeling.

It is because I believe in the uniqueness and significance of man's feeling not only for religion but also for art and morality, that I have ventured to depart from the main track of modern Vitalism, not only in affirming the presence of an immutable element of value and perfection in the universe, but in refusing to regard this element as an offspring of human thinking, an ideal of human progress or an emergent stage of human evolution, infinitely remote, no doubt, but lying nevertheless on the same plane as that process of continuous advance in the development of life and mind which Vitalism affirms and seeks to study.

Summary.

The conclusions which I have sought to establish in this chapter may be briefly summarized as follows.

Life evolves and changes continuously. The evolution of life is a process in which life emerges at successively higher levels,

each level of life being endowed with a power of deeper and more penetrating awareness than the preceding level. There is also in the universe an element which is permanent, perfect, and changeless, to which I have given the name of reality. It is upon this in its lowest form as the world of subsistent objects, that awareness is directed in thinking. In its higher forms, of which goodness, truth, and beauty are examples, there is at the present stage of evolution intermittent and indirect awareness of it in moral and aesthetic experience, and a more continuous and direct awareness in mystical experience.

The process of evolution, if it is also a progress, must have a goal. This goal may be defined as the continuous and untrammelled experience by life and by all life of those entities of goodness, truth, and beauty which are now experienced rarely and intermittently. These entities are not part of the process of life, nor are they contained in its nature; they are not affected by life's awareness of them and they are, therefore, indifferent to the movement of life towards them. Hence the ultimate awareness of them by life does not mean absorption in them. They and life remain distinct and irreducible principles.

CHAPTER IX

THE GOAL OF EVOLUTION

I. VITALISM AND INDIAN PHILOSOPHY.

FOR Buddhism, as for Job, 'Man is born to trouble as sparks fly upward'. Birth is attended with pain, decay is painful, disease is painful, union with the unpleasant is painful and so is separation from the pleasant. These pains can all be traced to one source, craving or desire.

> Verily [said Buddha] it is the craving thirst that causes the renewal of becomings, that is accompanied by sensual delights, and seeks satisfaction now here now there—that is to say, the craving for the gratification of the senses, or the craving for a future life, or the craving for prosperity.[1]

This craving is in its turn the outcome of individuality of which it is the inseparable accompaniment. The individual consists or is composed of a number of different units; he has form and substance, he possesses material qualities, and, as he rises in the scale of life, to these are added mental qualities; he is, therefore, like the world in which his life is passed, perpetual becoming. Since every person or thing, whatever in short can be regarded as an individual entity, is a putting together, a compound, the relations between its component parts must be constantly changing. Change means disintegration and decay; hence the moment individuality begins dissolution begins also. There can be no individuality without a becoming; there can be no becoming without a becoming different, and there can be no becoming different without a dissolution or passing away. The individual being in process of continuous change, is spurred by a continuous need. Feeling his limitation and separateness, he craves for that which will make him complete, for that which will make him one, and for that which will stay the course of his decay. Hence the craving for union with the pleasant and for separation from the unpleasant, together with all unsatisfied cravings, are the necessary concomitants of individuality.

This doctrine is applied with logical rigour to disprove the existence of the soul and also of God. Most of those who have believed in the existence of a soul have believed also that it survived the body, and for most religions the soul is immortal. Buddhism points out that an immortal, i.e. an eternally existing soul, would be one which had attained to a being without becoming, to an individuality without change, to a beginning without end;

[1] *Vinaya*, i. 10.

in so doing it would cease to conform to what we have seen to be the inevitable conditions of individuality. God too, if He is a personal God and not a universal spirit, would also be subject to the conditions of individuality; as an individual He would change and decay, and the essence of his goodness would be destroyed.

Individuality being the villain of the piece, it follows that the object of right living is to overcome it. Buddhism resolves itself, therefore, into a detailed account of the directions to be followed in order that this object may be achieved. Since individuality involves desire, and desire is the source of pain, these directions are concerned to set forth the way of emancipation from desire. 'Now this is the Noble Truth as to the passing away of pain. Verily! it is the passing away so that no passion remains, the giving up, the getting rid of, the being emancipated from, the harbouring no longer of this craving thirst.' The passing away of pain depends upon the emancipation from desire. 'Just as the great ocean has one taste only, the taste of salt, just so have this doctrine and description but one flavour only, the flavour of emancipation.'

The various stages of the famous eightfold path, right views, right aspirations, right spirit, right conduct, right mode of livelihood, right effort, right mindfulness, and right rapture, are all devoted to achieving emancipation from desire. To have traversed this path and to have broken the bonds of desire, is to attain the state of Arahatship, 'the state of him who is worthy'. He who attains this state in freeing himself from desire, is freed also from individuality, and freed, therefore, from the world of becoming.

In considering the implications of this doctrine it is important to bear in mind the fact that no provision is made for a spirit or soul that survives the body. Even if there were survival, the soul would not by reason of it be emancipated from desire. It would still be an individual soul, and as such would be filled with the craving which springs from individuality. So long as this craving continues, individuality continues; hence in most Eastern doctrines it is the fact of continued desire which leads to the incarnation of the surviving soul in a new body. The Buddhist, however, holds that no memory or consciousness survives the body; hence there is no soul to pass over from one body to another. According to Buddhist doctrine it is the grasping or craving which still exists at the death of the body which causes a new body to arise, which, being individual, continues to inhabit the world of becoming. Hence it is only the Arahat who has in his own life achieved emancipation from desire, who escapes the miseries of transmigration. Having conquered the cravings that produce the new body,

he escapes the necessity of rebirth, and passes out of the world of becoming into that of being. This is to achieve a state of bliss of which no account is given or can be expected. Essentially, however, it is a negation of the condition of individuality, in which the individual passes away and is lost in a universal being.

For Buddhism in common with other Indian philosophies, desire is evil and the source of evil; it springs from individuality and perpetuates the individuality from which it springs; hence effort is to be deprecated as involving a surrender to desire. Conclusions of this type are a well-known characteristic of most Eastern philosophies. The Western world, on the whole, has taken a different line; it approves of effort and endeavour and recognizes that without desire they would not occur. Desire is welcomed, therefore, as embodying the very essence of life. The discovery of evolution has confirmed and justified this attitude, which proceeds to find expression in theories such as that which I have advocated in Chapter IV. Life, I hold, not only maintains itself through effort and struggle; it is through them that it evolves and develops. The emergence of higher-quality life, however the word 'higher' be defined, is, therefore, the outcome of the craving which the Buddhist deprecates.

While accepting what may be called the typically Western view in the main, I have criticized it for its failure to supply an end to the process it discerns. Higher-quality life is meaningless unless there be some goal outside the life process, by degree of approximation to which the various grades of life can be measured. Western doctrines seem to me, therefore, rightly to emphasize the fact of evolution while failing to make provision for its end; Eastern doctrines while realizing the necessity for an escape from the process of becoming, and showing that it may be transcended by the achievement of a state of being, seems to me to misconceive the nature of the process by which that state is realized. The view I wish to put forward may be regarded, therefore, as an attempt to mediate between these two attitudes. I should hold, that is to say, that the West rightly conceives the nature of life and the obligations that living entails, but overlooks its goal; the East makes provision for the goal but prescribes a wrong way of life for its achievement. Upon my differences from the dominant Western view, so far as it expresses itself in current philosophies of Vitalism, I have already sufficiently enlarged; it remains to indicate points of disagreement with Eastern philosophies in so far as the Buddhist doctrine, briefly sketched above, may be regarded as typical of them.

Some of these differences I have already discussed at considerable length, and a brief statement will suffice here.

(i) For the Buddhist the way to true being is through the stilling of desire. Effort springs from desire; therefore for Eastern philosophy all efforts are to be deprecated except those which are devoted to the suppression of desire. I, on the contrary, have identified desire with the manifestation in the individual of the force of life. Were we to cease to desire, we should cease to live. Hence the emancipation from desire which the Buddhist advocates, would, on my view, involve not the achievement of being but the ceasing to be.

(ii) Further than this, I find in the effort that springs from desire the chief instrument of life's advance. Whether the effort finds expression on the animal plane in the struggle for existence, or at the mental level in the endeavour to formulate a new conception of the universe, to advocate a new code of morals, or to give form and shape to a new vision of beauty, it is through effort that consciousness is quickened, and the quality of life enhanced. Were it not for need and for the experiments which spring from need, life would be still at the amoeba level, and the movement of evolution would not have been.

(iii) For the Buddhist the source both of desire and of effort is individuality. This belongs of necessity to the world of becoming, and the path to the world of being lies through its negation; therefore the Buddhist seeks to lose individuality by freeing himself from the desire in which it is manifested. For me, however, individuality constitutes a necessary stage on the road to being. It is because of the curtailment of the full powers of life that its objectivation in a material mould involves, that the individual monad finds itself impelled to develop new powers. Were it not for individuality and the limitations which it imposes, life would be deprived of the incentive to struggle. If, then, it be true that new qualities emerge only as the result of struggle, it would seem that individuality is a necessary condition of their emergence. For the same reason I find myself unable to dispense with the conception of matter, or to regard its influence as something with which in the present stage of evolution it is possible for life to dispense. Matter is the obstacle which obstructs the flow of life, and conditions its dispersal into individual units. The dispersal of life by matter is, in its turn, the condition of that individuality whose value I have affirmed.

(iv) That individuality involves both pain and desire I agree. I do not, however, like the Buddhist, regard them merely as

stumbling-blocks, nor do I seek, at any rate at present, to supersede them. The reason for this different attitude to pain and desire is to be found ultimately in my different conception of the relation between the worlds of being and of becoming. For the Buddhist, individuality, and the pain, the effort, and the desire which spring from individuality, are the obstacles that separate us from being. Overcome these, he declares, and being will be achieved. For me there is no such short cut to the world of being. That such a world exists I have affirmed with emphasis in the last three chapters, but its realization is not for us here and now. It can only be achieved at a definite stage in the evolutionary process, which will emerge, as other stages have emerged, when the necessary preceding stages have been passed through. These intermediate stages can themselves be achieved only through a continuance of the process which has characterized the advance of life to its present level. In other words, individuality involving effort and desire being the necessary condition of the advance of life, is necessary also to the achievement of the goal, whatever it may be, at which life is aiming. There is, at the present stage of evolution, no immediate escape for any appreciable length of time from the world of becoming, and our duty, if I may use such a word, is to be found in this world and not, save in such intervals of solace and refreshment as the vision of beauty vouchsafed to us by art can afford, in an escape from it.

I differ, therefore, from the dominant philosophy of the East in not despising the ordinary life of struggle and enjoyment, of effort and reward. I recognize that the world of becoming is not the only world, and that another mode of activity is or will be possible to life when it has established permanent contact with a different world; but this recognition does not carry with it an injunction to pursue this mode of activity here and now. To each stage of evolution there is the way of life appropriate to that stage, appropriate, that is to say, in the sense that it is of such a kind as to facilitate the emergence of the next. The end of life as a whole may be the achievement of a state of Nirvana in the world of being, but it is a mistake to allow our ultimate destiny to determine our immediate conduct. Struggle and endeavour in the world of becoming must be regarded as the end relative to our present condition, rather than a premature attempt to escape from the conditions of becoming in the effort to achieve a realization of the world of being.

I am thus led to conceive the relation of life to the world of being somewhat differently from the philosophers of the East.

I have repeatedly emphasized in the preceding pages that this relation is for me one of contemplation. As I envisage the goal of evolution life as a whole will emerge at a level at which it is directly concentrated upon a world of objective value, and is continuously aware of that world. But this continuous awareness of reality is in no sense for me, as it is for the Buddhist, an escape from life.

> 'Tis life, whereof our nerves are scant, . . .
> More life, and fuller, that I want.[1]

Life at this ultimate stage in its full and complete expression will be engaged in contemplating reality, and in this contemplation all its energies will be absorbed; life in short will be exhausted by the activity of contemplation because it will become contemplation. It follows that there will be no residue of life to express itself in need or desire by the solicitation of which contemplation may be disturbed. I emphasize this point because, although the teaching of the East is not as clear as we could wish, there is, I think, no doubt that the possibility of such solicitation and of a consequent relapse into the world of becoming, is definitely envisaged. The state of Arahatship is not, we are expressly told, one of complete annihilation, it is an emancipation from a certain specified craving for certain specified things, those things, namely, which belong to the ordinary sensual life. The achievement of being is, therefore, represented as a definite escape from the world of becoming, which continues as it were to function on its lower plane. The life of the world of becoming is even at times represented as lying in wait as it were for the sage who has achieved emancipation, with the object of dragging him back into the stream of desire from which he has escaped. The state of *ἀταραξία* is thus subject to harassment and disturbance by the importunities of desire, and the sage must be constantly on his guard against relapse.

It is difficult to disentangle the essential doctrine here from the picturesque language in which it is normally embodied. It is clear, however, that the insistence upon escape with its implication that there is something to escape from, suggests that life is not exhausted in the contemplation of or by the absorption in being, but rather that it is only one aspect of life that makes its escape. It follows that life as a whole, *that which is escaped from*, still continues on its lower plane, undisturbed by the occasional departures from it of those who achieve Arahatship. It is at this point that the difference between this view and that which I am advocating emerges. For me the ultimate contemplation of reality by life as a whole as

[1] Tennyson, 'The Two Voices'.

opposed to the apprehension of it in intermittent experience here and now, is in no sense an escape, since there will be no life left over for life to escape from. The Will, to use Schopenhauer's language, will be completely affirmed in the contemplation of the real; this contemplation will be achieved not piecemeal but by life as a whole, and no lower manifestations of life in the world of becoming still subject to need and solicited by desire will disturb it.

I conclude this statement of differences from the Buddhist doctrine by emphasizing the points:

(1) That there is no end for the individual monads of life at their present stage of development outside the world of becoming, but that it is through struggle and effort in this world that life advances.

(2) That the evolutionary process is an indispensable condition to the realization of the world of being, but that once this realization is achieved, it will be achieved by life as a whole, so that life's experience of the world of becoming and its participation in that world, will cease once and for all. Thus the Life Force will come to rest in the contemplation of reality.

II. FINAL STATEMENT OF POSITION.

I can now proceed to a final statement of my position, beginning with a short summary of the main outline and enlarging later on points of importance.

The universe contains entities of three distinct kinds, life, matter, and immutable non-material objects. Each type of entity is irreducible and cannot be resolved into entities belonging to either of the other types. Life is initially unconscious but is characterized from the first by the potentiality for consciousness, the distinction between consciousness and unconsciousness being one of degree not of kind. Wherever we find life it appears in association with matter, the individual being a monad or current of life temporarily associated with a piece of matter. The relationship between this monad and the matter in which it is embodied has, up to the present, defied complete analysis. It is clear, however, that analogies drawn from the mode of interaction between material substances must of necessity be misleading. A famous analogy of this type, of which use has recently been made by Sir Arthur Keith, is based upon the relationship of the flame to the candle. The flame is an emanation from the candle; it depends upon the candle for its being, and it ceases to be, when the candle is burnt out. So, materialists urge, the soul or mind is an emanation from the body, dependent upon the body for its existence, and unable

to survive it. The mind is also ambiguously described as a 'function' of the brain.

But the use of this simile begs the question at issue. If we must use material analogies to assist us to imagine the mode of interaction between the material and the immaterial, let us think of a portable wireless set and the ether waves that it intercepts. Now because the batteries require water, or the set is damaged, nobody would contend that the waves which it had previously intercepted but intercepted no longer, were no longer there. From the fact that the receiving set has ceased to transmit, it does not follow that there is nothing to transmit; it is sufficient to point out that the transmitting medium has ceased to work. Now wireless vibrations in the ether are the least material sort of material thing that we know. When, therefore, we are considering the interaction of mind with body, an analogy drawn from their mode of operation, though of necessity misleading, will be less so than that of the flame and the candle.

Again, I should like to picture life's relation to the body in the likeness of a skilled pianist playing upon the notes of his instrument which he uses as his means of expression, while I think of the brain as a telephone exchange through which the mind transmits its messages to the body. When the exchange wears out or is irretrievably damaged, we say that there is death, by which we mean that the transmitting agency can no longer use the exchange to send its messages.

But in the last resort we must admit that we do not know how mind interacts with matter. All that we are entitled to say is that the facts of biology and psychology strongly suggest that the behaviour of living organisms can only be interpreted in terms of the interaction between matter and something which is not matter but which utilizes matter for its manifestation.

It is sometimes urged against this view that the creation of life by bio-chemists is within reasonable distance of achievement. Many of the organic compounds found in living organisms or secreted by them, such as urea, sugar, starch, and others, can now be manufactured with ease; hence, it is held that if we could continue the manufacture of these organic compounds until we had made a mass of protoplasm, and could subject the protoplasm to suitable treatment, we might expect it to exhibit the phenomena of the living organism. As to the likelihood of this development I have no right to an opinion one way or the other. I am concerned with it only as it is advanced as an argument against the view I have been advocating, and in this connexion I wish to point

out that its successful realization would in no sense invalidate that view. I have never maintained that life is the sum total of its living manifestations, or that it can only exist in association with matter; the Life Force, I have affirmed, is something over and above its individual expressions in matter, but it may well be that it can only make use of matter which has reached a suitable condition. To borrow a metaphor from electricity, many kinds of matter may be impervious to the current of life, and, as I have pointed out in Chapter IV, there will be degrees of suitability even within the matter which is susceptible to it. Thus different chemical combinations will take different potentials of the Life Force, the brain of a civilized man being an instrument suitable for the reception of a more highly developed form of life than the jelly-like substance of the amoeba. This does not mean that life develops *in vacuo* as it were, and waits for the chance occurrence of material combinations suitable for its reception. The development of mind and brain proceeds, as we have seen, *pari passu*. Life conditions the increased refinement and complexity of matter, by virtue of which its own further advance is rendered possible, so that once life has succeeded in effecting a lodgement in matter, we may leave the future development of the body and brain to the drive of life's need to perfect its own instrument.

We may suppose, however, that life at first entered into association with matter, so soon as the latter had reached, independently of the influence of life, a condition fit for its reception. What are the revelant facts? They are first, that living things have appeared on the planet, and secondly, that the planet was at one time a mass of molten material or even of glowing gas, upon which life as we know it would have been impossible. Unless, which of course is possible, life was present in the particles of matter from the beginning, something of the kind here suggested, namely, the introduction of life into matter, must have occurred at some definite stage in the development of matter. Now the stage of material development reached by natural means in the past may quite possibly be effected by human agency in the future, in which event the entry of life into matter can be managed and controlled. But, on this assumption, it is not life itself that will be manufactured by chemists; it is only its *entry* into matter that will be artificially induced. There is a radical difference between a mere mixture of salts and a living organism, a difference which can only be explained by saying that the latter possesses the element of life which the former lacks. Hence whether the appropriate mixture of salts and gases is reached by chance or by design, by natural

means or by human inventiveness, it remains merely the kind of matter which is suitable for the reception of life, and life must be postulated as antecedent to its appearance in such matter. Thus life will not be explained, still less explained away, by the chemical creation of living organisms; it is merely the mode of its realization in an individual monad that will be revealed.

The individual monad having separated from the main stream of life and entered into association with matter, the association continues for so long as the individual persists as an individual. Upon the break-up of the individual's body there is reason to suppose that the monad of life returns to the main stream with which it is again merged; life is not, therefore, exhausted at any one moment by the sum total of its manifestations in matter.

Life is a dynamic force or activity; the chief characteristic of this activity being that of awareness. It is the essence of life to be directed upon something other than itself; life so directed is said to know or to be aware of that upon which it is directed. This awareness is *per se* an unchanging characteristic of life; it is unique and uniform in respect of the fact that it is on all occasions of its exercise just its own identical mode of activity, the awareness of the amoeba being *qua* awareness the same as the awareness of the man. Awareness, however, varies from one occasion to another in respect of the differences in that of which there is awareness; thus what differentiates one act of awareness from another is not a difference in the intrinsic characters of the acts, but in the nature of the objects upon which they are severally directed. When awareness is directed upon physical objects it is called sensation; when it is directed upon subsistent objects it is called thinking.

Through its individual manifestation in material forms life progresses, continuously achieving higher qualities and wider powers which are to be interpreted in terms of an increased capacity for awareness. These higher qualities and wider powers are acquired by means of the continuous effort and struggle which are imposed upon the individual monad as a condition of its existence by the limitation of the material framework in which its life is manifested. Each fresh acquisition of knowledge, skill or sense enables life to rise above itself, so that it may be said to emerge at a new level. The notion of emergence in this connexion means that at any given level of life, life is more, in the sense of possessing higher qualities and exhibiting greater powers, than it was at the previous levels from which it has developed. The acquisitions which any individual monad makes during that manifestation of life in matter in which its individuality consists are not lost at death, but are

transferred to the main stream of life which is thus continually enriched by the new characters with which it is endowed by its individual monads. These new characters reappear as part of the initial inheritance of the succeeding monads in which life is manifested, which thus start higher up the scale of life than their predecessors in virtue of the efforts of their predecessors. By this means a new level of emergence which is achieved in any one individual, tends to be preserved and to become the level of life's manifestation in all individuals.

It is only on this assumption that we can explain the apparent paradox, that life which acts in and through individuals, is nevertheless concerned to achieve ends which transcend individuality; that the individual, who is the indispensable instrument of life's advance, is, nevertheless, superseded and eliminated as though he were of no account. Everything, in short, points to the view that the individual is essentially a means to the attainment of that which is beyond individuality. The individual organism is a material engine, a trap to catch and to fix the blind force and energy of life, and to build it up into higher and more perfect forms. Similarly the doctrine of the inaccessibility to the individual of certain vital powers, such as clairvoyance and telepathy, which are called abnormal, is designed to explain the further paradox that life chooses voluntarily to limit itself by manifesting itself in a material mould, in order that its individual units may be stimulated by the struggle which limitation engenders to achieve powers which will enable life as a whole ultimately to transcend its self-imposed limits.

Higher qualities and greater powers of life are to be defined in terms of scope and sublety of awareness. The lowest forms of life are aware only of sense-data belonging to their own material structures and originating in those structures. More developed forms are aware also of sense-data externally originated; later forms still are aware not only of sense-data, that is to say of the constituents of the physical universe, but of a new type of object which I have denominated by the term 'subsistent object'. Thinking is the awareness by life of subsistent objects and of the relations between them. By the achievement of thinking, life, which is no longer confined as regards the objects of its knowledge to the constituents of the physical world, has obviously made a considerable advance; it is this advance which separates man from the animals. (I am not, of course, asserting a clear-cut division here, any more than the anthropologist who traces the evolution of man from lemur or ape through Pithecanthropos and Neanderthal man. Some animals obviously think in a rudimentary way, dogs for

example exercise memory, a process which necessarily involves the awareness of subsistent objects—see Chapter III, pp. 103–108. But thinking as a normal, habitual activity is not an animal but a human characteristic.)

The highest level at which life has up to the present emerged is that manifested in man. At this level life is normally aware both of physical and of subsistent objects, the evolution of man during the period of recorded history pointing to a growth in his awareness of the latter and a diminution in that of the former. At this stage, however, there begins to emerge the awareness of a new type or object, which, while it resembles the subsistent object in that it is not a constituent of the physical universe, differs from it by reason of the fact that it possesses value. Of this new type of object we have at best but fleeting glimpses which the artist recalls and reproduces in his work; the mystic endeavours to prolong these glimpses into a steady vision and to remain in a state of permanent awareness of what the artist apprehends intermittently. The fact that our intimations of this new world, which I have termed the world of reality, are infrequent, fleeting, and intermittent precludes us from giving any account of the objects that belong to it. The most that we can say is that they include at least those objects which are known respectively as truth, goodness, and beauty, our reason for making this assertion being that the objects in question do possess in common the characteristic of being intimately bound up with whatever in the physical universe is recognized as possessing value. Our awareness of value is a unique activity in the sense that it is felt to be different from our awareness [1] of anything which is without value; we find, therefore, our justification for placing goodness, beauty, and truth in the real world in the significant character of the feelings that we have in common for ethics, for art, and for mathematics. I do not mean that the feeling that we have in regard to a good action is the same as that aroused by a good picture, but simply that both of them are felt, and are felt in the same way, to be significant. Our experiences both of good actions and of aesthetic objects appear, in short, to bring us into contact with that which, while recognized as possessing value, is recognized also as deriving its value from a something other than itself which does not belong to or enter directly into the sensory world.

[1] This does not mean, of course, that the awareness of value is different from the awareness of sense-data, so far as its intrinsic character as awareness is concerned. My point is (see Chap. IV, pp. 146, 147) that extrinsic characters are conferred upon the awareness by the nature of the object upon which it is directed.

In explanation of this latter statement I may recall the emphasis I have laid upon the importance of maintaining the gap of real discontinuity between the world of value and the sensory world of everyday life. In order to safeguard the validity of this gap I have envisaged the relation between subsistent objects, and in particular those among them which are the repositories of value, and the world of physical objects rather differently from most of those who have been anxious to maintain the unique and objective character of value.

So far as the relationship between subsistent and physical objects is concerned, I have persistently refused to commit myself to any suggestion of continuity of substance or of being between the two worlds. The subsistent object does not, in my view, enter into or manifest itself in the physical object, which is its counterpart; it does not even give it shape and form, or endow it with qualities. For this reason I have carefully avoided the use of language which would seem to indicate agreement with the view of the relationship between the subsistent and the physical worlds advocated by Professor Whitehead, according to which the subsistent object 'ingresses' into occasions and bestows their characters upon events. I am not here concerned to criticize Professor Whitehead's general position; it is, however, obvious that his view of the relationship between his eternal objects and the events necessarily involves a very different conception of the universe from that envisaged in this book. The universe, for Professor Whitehead, is a unity of prehensive occasions, each occasion being constituted a unity by the fact of its prehension within itself of all the occasions which by various modes enter into it. A universe so conceived is one in which there are no gaps of discontinuity; everything is inextricably interwoven with everything else, and everything contributes to the shaping and moulding of everything.

In the universe whose outline I have been engaged in sketching, the relationship between Professor Whitehead's eternal (my subsistent) objects and the passage of events (my physical objects) has been differently conceived, my inability to follow Professor Whitehead being due to a number of reasons of which I will instance two. The first arises from the fact that the world of subsistent objects is of necessity unchanging, while the physical universe is a constant flux. I cannot understand how the unchanging can enter into and give shape to the changing, without either itself partaking of the nature of change, or causing the changing to take on some of the characters of the changeless.

Secondly, the world of subsistent objects is not a physical

world; it is not, that is to say, in space-time, and does not obey the laws of physics. To use an old-fashioned word, it is not 'material', and it follows, therefore, that it is not perceptible to the senses. The physical world is in space-time, obeys the laws of physics, and is material and perceptible to the senses. My first objection applies, therefore, in another form; I assert that an object belonging to one world could not enter the events of the other, without coming to partake of the nature of the other world or else of conferring something of its own nature upon it. Even if association between two such radically diverse entities as the changing and the changeless, the material and the non-material, were possible, and I do not think that it is, it would blur the clear outline of the distinction which I am trying to maintain, by bridging the gulf of discontinuity between the physical world and the world of thought upon which I have insisted.

I can see no way in which the relationship which Professor Whitehead has in mind, however it be described, can without self-contradiction escape the dilemma which beset Plato's attempt to give an account of the relationship between the Forms and the particulars. If that relationship is one of participation by the particulars in the Forms, it is necessary to show how the perfect and changeless can be the cause of the characters of the imperfect and the changing, without communicating to it its own characteristic of changelessness. If it is one of imitation only, the particulars imitating or being modelled on the Forms, there can be no causative connexion of the kind asserted between the Forms and the characters of the particulars. When Professor Whitehead asserts that the eternal objects 'ingress' into occasions in such a way that the eternal objects impregnate the whole occasion, giving it shape and form, determining its 'what' and bestowing all its characters (other than its spatio-temporal characters) upon it, he is faced with the participation difficulty. When he tries to avoid this by maintaining that the relationship between eternal object and event is extrinsic (as opposed to the relationship between eternal object and eternal object, and between event and event which is in each case an intrinsic relation), it is clear that he is trying to retain the eternal object pure and undefiled, uninfected by its entry into the world of events. If it is so uninfected, as I maintain it is, then it cannot be regarded as the cause of the characteristics of the events through its entry into them. If it is not, then the view that it belongs to a different order of being must be given up.[1]

[1] Professor Whitehead's language is, if I may venture the criticism, so difficult

Since all attempts to give an intelligible account of the relationship between the two worlds in terms of causative connexion seem to end in self-contradiction, I can but adopt the position maintained in Chapter III, and confine myself to postulating a relationship of non-significant resemblance. By the word 'non-significant' I mean merely to imply that the question whether there is to any particular subsistent object a physical counterpart, i.e. a physical object which actually reproduces the characters of the subsistent object, is one to which there is no rational or necessary answer; the existence of a physical counterpart to a subsistent object is, in other words, an arbitrary contingent fact of which no explanation can be given. All that we can say is that the physical universe contains certain constituents which exhibit certain qualities. Since the realm of possibility to which the subsistent

and his use of terms so novel that it is not always easy to tell precisely what his position is. There is, I think, no doubt that the view he advocates is one in which an actual occasion is represented as a complete unity of eternal object and event. But it often seems as if this view reduces itself, in spite of all that Professor Whitehead can do to prevent it, into something that approximates to the complete bifurcation—to use his own expression—between the two worlds which I have maintained in the text. For Professor Whitehead there is bifurcation in essence between the world of objects and the world of events, the world of possibility and that of realized occurrences. But this bifurcation is not absolute, since the eternal objects cross the gulf, as it were, in order to bestow their characters upon the events. Hence an actual occasion is an event which owes its characteristics to the ingression into it of eternal objects. (The actual occasion is, of course, much more than this; I am only giving a partial description of its ingredients.)

But eternal objects do not bestow upon events literally all the characters which the events are found to possess. Those characters which the events owe to their position in the spatio-temporal continuum belong to them in their own right, independently of the ingression of eternal objects. There is thus a bifurcation within the event itself between those characters which are due to the ingression of eternal objects, and those in the determination of which the eternal objects play no part. Characters of the first class turn out on examination to be in all respects eternal-object-characters and in no respect event-characters. This follows from the fact that in so far as the eternal objects enter into events, they impregnate them through and through, so that, with the exception of the spatio-temporal characters, there is no part of the impregnated event of which it is possible to say that its being what it is is due to its status as event, and not due to the ingression of eternal objects. Hence, if from the impregnated part of the event we subtract the ingressing eternal objects, there is literally nothing left over. Hence, for 'characters of events due to ingression of eternal objects', we may read simply 'eternal objects'.

As regards characters of the second class, they are event-characters, owning no connexion with or participation in eternal objects. Thus within the alleged event itself there is an irreconcilable refusal on the part of the two worlds to blend or to interpenetrate; they are left facing each other across a gulf of pure otherness; all attempts to cross this gulf, of which Professor Whitehead's is the most original and ingenious, being foredoomed to failure. The conclusion seems to be that we must forgo any attempt to bring the objects of thought and the objects of sense, the eternal world and the changing world of physics, into organic communication.

objects belong contains all possible objects related to each other in all possible ways, it follows that all the constituents of the physical universe possess counterparts among the subsistent objects. Thus the actual world of physical objects is a selection from the world of subsistent objects, and the relations obtaining within it are a selection from the relations holding in that world. My account of the relationship between objects of value, such as goodness or beauty, and the individual acts, and works of art, in which they are commonly said to be manifested, follows the same lines. I have, that is to say, been careful to reject the view which is often maintained by those who disavow the subjectivist interpretation of aesthetic phenomena, that the value of a picture or of a piece of music is due to the fact that the Form of beauty actually is, in some mysterious way, manifested in it. Were such a manifestation possible, we should be faced with a bridging of a gap of discontinuity of precisely the same kind as that which I have denied in my discussion of the relation between subsistent objects and events. But is it possible? Can the perfect and unchanging enter into contact with the imperfect and changing? I assert that it cannot; contemplation of the changeless by the changing there may be, but organic connexion implying continuity of being between the two is clearly impossible, if both are to retain their peculiar characters. The difficulty is once again precisely that which Plato failed to solve when he endeavoured to explain how the particulars could participate in the Forms.

In order, therefore, to retain the gulf between reality and the physical universe I have derived the significance of works of art not from the actual manifestation in them of reality, but from the artist's remembered vision of reality, which he has succeeded in reproducing in his work. I conceive the artist to impart to the matter of the physical world something of the forms and shapes of the real world, thus creating in the sensory world a copy or imitation of the patterns of reality.

Hitherto I have been engaged in summarizing the positions which the preceding pages have tried to establish. I have now reached a stage at which, to complete my system, I must make some attempt to deal with the question of the nature or purpose of evolution.

The movement of evolution is, I have suggested, purposive. The purpose is at first unconscious, but the potentiality for purposive action is latent in life from the beginning. As life advances by means of interaction with matter this quality of purposiveness emerges into consciousness. The purpose may be defined at each

stage of evolution as an impulsion to advance to a higher stage. Thus it may be said to be the purpose of life at the stage of the Mesozoic reptiles to produce mammals, at the mammal stage to produce man, at the stages of instinctive primitive man to produce civilized thinking man and so forth. With the awareness of subsistent objects in which thinking consists, there emerges for the first time a consciousness of a more ultimate purpose. In the artist and the mystic life obtains its first fleeting glimpse of reality. Life at this stage is unable to retain the vision of the real (save at a cost to which I shall refer later), but in view of what has been achieved we may conceive that the artist and the mystic to whom the vision of the real is first vouchsafed, are merely the forerunners of a further development and that life as a whole will reach a stage at which the untrammelled contemplation of the real will be its main if not its only activity. It is this realization of the real world, the world of being, which may be provisionally defined as the ultimate purpose of life.

This is as far as we can go at present, but it must be borne in mind that it is not necessarily the end. All that we can say is that it is the furthest stage of which we have any intimation; if, therefore, there are further stages, it follows that we have and can at present have no knowledge of them. The evolution of life is on this hypothesis a process which, beginning with awareness of matter, advances through interaction with matter to a knowledge of reality. This knowledge, however, is not to be interpreted as implying identification with what is known. Life will remain as sharply distinguished from reality in the final stage of contemplation as it is at present when reality is known only intermittently through its likeness in a material setting.

The question may be asked, why, if the purpose of life is the contemplation of reality, it should manifest itself in matter, seeing that the necessary consequence of such manifestation is the awareness not of reality but of matter. The answer to this question must of necessity be highly speculative. Not being life itself but only temporary individual manifestations of life, we can only observe what life does; we can only guess why it does it. With the proviso, then, that the answer I am suggesting is little more than guesswork, I will hazard one which is naturally suggested by the course of the preceding argument.

Many thinkers have identified matter with the evil in the universe; for them it is the principle of chaos, of disorder, even of mischief. Without wishing to bestow moral, or rather amoral, attributes upon a substance that I should prefer to regard as

ethically neutral, we are bound on any view such as that which I have advocated, to see in it an obstacle to life. Life appears in a world which is fundamentally material, a world which, we may presume, it is driven by the impulsion of its own being to alter, to modify, perhaps to overcome and to pass beyond; yet it may well be that it is only by entering into it that it can act upon it, only by permeating it that it can make it amenable to its will. Everything points to the view that matter is something to be worked through before life can penetrate to the world of values which the material world masks and overlays. We cannot, for example, become aware of subsistent objects until we have first perceived the material objects which are their physical counterparts. Thus it is necessary to provide the child with bricks and beans with which to count, before he can understand the propositions of arithmetic, the number two being only grasped after experiments with pairs of material objects. Again, to take another example, we do not know subsistent objects in memory or thought until we have first experienced their physical counterparts in sense perception. You cannot recall a face or a tune until you have first experienced it. Thus the way to thought lies through sense perception, the function of the senses and of the awareness of physical objects by means of the senses being to draw our attention to objects of thought. Similarly for most of us the first intimation of the existence of value is through the representations of it which artists have made in a material medium. The mystic may perceive beauty direct, but we can only hope at best to catch her image in music and painting.

I suggest, then, that life objectifies itself in matter, and is, in consequence, primarily engaged in the awareness of matter as presented in the form of sense-data, because matter is a necessary obstacle through which life must pass on its evolutionary journey to the world of value. But if matter is an obstacle, it is one which sharpens and refines. New levels of life, we have suggested, emerge as the result of effort and struggle at the preceding levels. Effort and struggle result from limitation, and it is by matter that limitation is imposed. Because of this limitation the exercise of the full latent powers of life is, as we have seen, withheld from the individual monads; to its agency, therefore, we must attribute the impulsion to strive, to endeavour, and to overcome, which the sense of limitation generates. Thus matter, simply because it is an obstacle to life, provides the incentive to transcend the obstacle, and, in so doing, unconsciously stimulates life and develops it. It is the whetstone upon which life is sharpened, so that with

powers enhanced and faculties at cutting edge it may go forward to the task before it. This task is nothing less than the elimination of the obstacle against which it has struggled and by means of which it has risen. I conceive, that is to say, that once life has reached a certain stage of development it will escape from matter and cast it away, as a butterfly discards the outworn chrysalis. And just as the butterfly opens its wings and flits through the sunlit meadows, realizing its full nature and completing its being in the sun that warms it, so life released from the prison of matter will attain to its full development in contemplation of the world of reality. And just as the passage through the chrysalis is necessary to the development of the butterfly, so is the passage of life through matter necessary to its emergence into the light of the world of being.

It is not merely the elimination of matter considered as an object of awareness that I am envisaging here. So much of course is necessarily involved, but a more radical emancipation is possible. I suggest that at a certain stage of evolution life rises above the need to objectify itself in matter, so that life as a whole will ultimately be freed from the material bonds within which the individual monad is at present enclosed. Some measure of emancipation from the material limitations of our bodies has indeed already been achieved. First there is a growing mastery over the forces of nature, which we are enabled increasingly to harness to our uses. By the construction of appropriate machines we have made not only gravitation our slave, but also electricity and magnetism, atomic attraction, repulsion, polarization, and so forth. We can utilize these forces to transcend our limitations by making for ourselves new limbs to supplement our original bodily inheritance, cranes and elevators to do the work of arms, and trains and motors to take the place of legs. We have learned to fly and supply ourselves with wings in the shape of aeroplanes. In the second place we attain to an increasing mastery over the matter which constitutes our own bodies. We have changed and continue to change the structure of our bodies by the use to which we put them. Within the comparatively brief period studied by anatomy we have learned to dispense with tails, and we are progressively eliminating organs such as the appendix, and growths such as the toe-nails, for which we have no further use. The impulsion to think has caused us to achieve an unprecedented growth in brain structure, and the increasing size of the human head adds to the difficulties and dangers of childbirth. These changes have been wrought unconsciously; but we also possess powers over the

body which we exercise consciously. With each generation that passes we can for longer periods prevent the body from decaying, and, when at last decay sets in, we can hold life in the body and so for a longer period prevent dissolution. The regeneration of aged bodies is already well within the bounds of medical science. We can turn cretins into normal human beings by suitable injections, and are within measurable distance of controlling man's emotional life by regulating the secretions of the ductless glands. Apart altogether from the prospects of determining the sex of our children, we should be able by gland manipulation within the next hundred years, to make ourselves choleric or timid, strongly or weakly sexed at will. Everything points to the view that our present power over the body will be still further increased in the future. Thus our power has grown both over matter in general and over the matter of which our bodies are composed in particular.

Our growing mastery over matter carried with it two consequences, both of which make for greater freedom. As we consider the relationship of life to matter over the period of recorded history, we observe it to be characterized by a diminution of interest in and a lessening of dependence upon matter. By a diminution of interest I mean a restriction of our awareness of material objects, which tends gradually to be replaced by an awareness of subsistent objects. Each fresh advance in power over matter diminishes our need to know it. For example we do less with our hands than our ancestors; we do not carry weights about, defend ourselves from attack or develop great muscular strength. Compared with primitive man we make but little use of material physical objects. So true is this that the ordinary clerk or professional man can, broadly speaking, go through the day without using his hands at all except to dress and feed himself and to write. Our senses decay as the need for awareness of sense-data grows less; the savage can hear noises to which we are deaf, and our sense of smell grows duller with each generation. These changes mean that the objects upon which our attention is directed are decreasingly physical and increasingly subsistent objects. Within the short period of recorded history we have come to think more and to sense less, while there has emerged for the first time an awareness of objects of value. Thus we have already advanced some distance on the road which ends in a complete neglect of matter, and an exclusive absorption in objects of value. Concurrently with our decrease in interest our dependence upon matter grows less. The account of the Ancients in the last play of Shaw's *Back to Methuselah* pentateuch presents a vivid picture of

possible future developments in this direction. The Ancients have achieved an almost complete emancipation from bodily needs and limitations. They no longer sleep or eat, they do not make love, and they have outgrown the need for amusement. Even art is discarded by the age of four, on the ground that it presents us only with the images of the real, and nobody will stay for the image who can contemplate the original. They have no desire to speak and have forgotten the use of language. Their power over the matter of which their bodies are composed enables them to change their bodily structure at will. Experimenting with the use of these powers they play tricks with their bodies and make themselves into fantastic monsters; they walk upon a dozen legs, work with twenty hands and a hundred fingers, look to the quarters of the compass with eight eyes out of four heads. Barring accidents they can maintain life indefinitely, but so long as they retain the body their lives are subject to any accident that can destroy the body.

The subservience of life to matter has here fined itself down entirely to the liability to material mischance. The further stage to which the Ancients are already looking forward is that of complete emancipation from the body, so that they may continue in contemplation of that world of reality which increasingly occupies their attention, undisturbed by the solicitations of this outworn heritage from man's past. All the things with which human beings have amused themselves, images and pictures, love and science, have one by one been superseded, and nothing remains beautiful or interesting except thought. The body, they say, is the last doll to be discarded. When this final emancipation is achieved there will be no people, only thought. Thus life becomes a whirlpool in pure intelligence which, when the world began, was a whirlpool in pure force.

The theory elaborated in Part I, that the process of evolution from unconscious will-to-live to conscious intelligence, is achieved only through development in matter, is vividly expressed in Lilith's final speech. 'I brought life into the whirlpool of force', says Lilith, 'and compelled my enemy, Matter, to obey a living soul. But in enslaving Life's enemy, I made him Life's master; for that is the end of all slavery; and now I shall set the slave free and, the enemy reconciled, the whirlpool become all life and no matter.' [1]

I have tried in the preceding pages to work out the details of the process here suggested; but there is one point in which I have ventured to differ from Shaw as touching the nature of its end.

[1] Shaw, *Back to Methuselah*, Part V, p. 266.

Emancipation from matter does not for the author of *Back to Methuselah* mean the end of individuality; the Ancients do not aim at absorption in life but at becoming vortices in the whirlpool of intelligence, and in the vortex the germ of individuality still persists. Now the existence of the individual monads of life is, on the view I have been advocating, due to two different causes. First they are children of necessity, since the force of life, coming into contact with matter, is dispersed by matter into an infinity of vital fragments, as a wave is dissolved into spray by the rocks. Secondly, they are the creatures of choice, the outcome of life's realization that it is only by objectifying itself in the material obstacle that bars its path that it can overcome the obstacle. But, once the obstacle is passed, the necessity passes with it. There is nothing to breach and to disperse the stream of life, and there is no longer, therefore, a need for life to achieve individuality by objectifying itself in matter. The individual monads have brought their acquisitions to the main stream for the last time, and become permanently merged in it. In this sense, and in this sense only, plurality is temporary and incidental. There is no unity at the end, any more than there was at the beginning, between life and reality, or between life and matter, but life does achieve a unity within itself.

Some, no doubt, will find this view a depressing one; but I cannot agree with them. If our planet had been created a few thousand years ago to end a few thousand years hence, it would be conceivable that the main purpose to be worked out upon it is the perfection of individual human beings. But no philosophy which accepts the facts of geology can regard such perfection as anything but an individual phase in a process which transcends it. To me indeed there seems something trivial in a view which, contemplating the universe as presented by astronomy and geology, regards the preparation of a certain number of human souls for as much happiness and perfection as they can achieve as its main purpose.

The separate streams of life, having reverted for the last time to their source, life becomes a vast universal flow, a sea of consciousness with awareness permanently directed upon reality.

Professor Whitehead eloquently expresses something of the same idea at the end of his recent book, *Religion in the Making*, where he presents to us a vision of the universe

> passing with a slowness inconceivable in our measure of time, to new creative conditions, amid which the physical world, as we at present know it, will be represented by a ripple barely to be distinguished from

non-entity. . . . There remain the inexhaustible realm of abstract forms, and Creativity, with its shifting character ever determined afresh by its own creatures and God, upon whose wisdom all forms of order depend.[1]

This picture of the universe resembles my own in its affirmation of an ultimate pluralism between life and the objects of its contemplation; it reflects too what is fundamentally the same aesthetic view of the universe (if I may be forgiven this somewhat loose use of the word 'aesthetic'). It differs, however, from my theory in three important particulars.

In the first place it presupposes an indefinite continuance of individuality. Life will evolve continuously and for an apparently indefinite period, changing its character, as the finite creatures change in which it appears. In my view the individuality of finite creatures proceeds from the necessity under which life finds itself to take shape in matter; hence individuality will disappear when the matter which gave it birth is superseded. Life may, and perhaps will, continue to evolve—perhaps it is the essence of life to evade finality—and it may fail to come to rest even in the uninterrupted contemplation of reality. I do not positively assert that the final destiny of life is to contemplate reality; it would be folly to make any assertion about a stage of evolution so infinitely remote as the end of life itself, if end there be; I affirm merely that such contemplation is the furthest condition that thought can envisage.

Secondly, I see no reason to suppose that the fact that life has passed beyond matter, is emancipated from the necessity for manifestation in matter, and is aware no longer of sense-data but of reality, means the disappearance of matter from the universe. My three principles, life, value, and matter, are ultimate and irreducible, separated by real differences, and implacably resistant of any attempt to fuse them into a unity. Changes in one need not, therefore, of necessity produce changes in the others. The withdrawal of life from matter may cause the disappearance of those highly refined forms of material structure, the brain and the nervous system which, in my view, have developed *pari passu* with the mind. But, though the forms of matter may change, matter itself will remain unaltered. As for life's awareness of matter, I have maintained that the knowledge relation is one in which the object of knowledge is not affected by the circumstance of being known. Hence the fact that matter is no longer either used or observed by life, does not mean its subsidence into 'a ripple barely to be distinguished from non-entity'.

In the third place, I have carefully refrained from including in

[1] Whitehead, *Religion in the Making*, Chap. IV, p. 144.

the world of value any element which might be identified with God. This is not because I deny the existence of such a Being, but because of an inability to make any positive affirmation about Him. To arrange the world of value in a hierarchy beginning with the subsistent objects and ascending upward through Beauty, Truth, and Goodness, to God, would have been easy. It is even possible that such an arrangement might represent the structure of reality; but I do not feel that the evidence is sufficient to justify the assertion.

It is part of my general position that knowledge of reality comes to us at present through a series of fleeting and uncertain intuitions. As a result, we have a vague intimation of it rather than a clear apprehension, an intimation which, while permitting us to affirm its general characteristics of permanence and perfection, does not entitle us to determine the number and grading of the entities of which the characteristics are affirmed. In Professor Whitehead's scheme God occupies a definite and necessary position as the principle of the actualization of possibility. He determines the mode in which the eternal objects 'ingress' into the passage of events, and is, therefore, responsible for the characteristics which the sensible world is found to possess.[1] For me, however, the sensible world is an arbitrary given fact; it is what it is independently of the subsistent objects which remain separated from it by an impassable gulf. There is, therefore, no need to invoke the principle of deity to perform the function which Professor Whitehead ascribes to God.

The above is an outline of the system advocated in this book. I contend that it provides for all the various types of entities which the universe exhibits; that it gives due weight to the facts of evolution and emergence, that it provides for the unique significance of value, and that it does not achieve an unwarrantable simplification at the cost of reducing fundamentally different constituents to an all-including unity. I have only to complete my account by a brief description of the parts played by the leading actors in the evolutionary drama. These are the artist, the poet with whom we may identify the preacher, and the mystic.

III. THE ARTIST, THE POET, AND THE MYSTIC.

1. *The artist.* In the artist life emerges at a level at which it obtains for the first time fleeting and intermittent glimpses of reality. In this respect the artist is to be ranked with the mystic as belonging to a class whose distinguishing characteristic is that its members

[1] Whitehead, *Science and the Modern World,* Chap. XI, especially pp. 221–3.

are capable of a direct vision of the world of value. The artist, therefore, fills for me the role which Plato assigns to the philosopher and Schopenhauer to the man of genius.[1]

Both artist and mystic are contemplators of reality. For reasons already considered at some length, it is not possible for the changing and imperfect to enter into relation with the changeless and the perfect otherwise than through contemplation. Knowledge, in my view, is not an act of self-assertion, a projection of the self upon the canvas of the universe, but a form of intercourse between the self and the not-self. Like all intercourse knowledge is impaired by dominion, and is nullified by the attempt to dictate to the universe that it shall be this or that, which is to force it into conformity with the ideals that emanate from ourselves. Knowledge so conceived robs contemplation of all that gives it value, since it narrows the horizon of the mind to the limits of its own creativeness. It interposes between the self and the universe that stretches beyond it a barrier composed of the prejudices, habits, desires, and limitations of the self, and so shuts it off from the universe which is greater than the self. The man who delights in such a theory of knowledge is like one who never leaves the company of his inferiors, for fear that outside it his word might not be law.

For this reason I cannot but regard as a derogation from the dignity of the universe and hence of the mind which enters into intercourse with it, any attempt to picture that intercourse as a form of union revealing the real as fundamentally akin to, if not continuous with, our spiritual nature, as being in the last resort something to whose making we have ourselves contributed, or from which we ourselves have sprung. I prefer to think of the relation as one in which the self is brought face to face with the not-self, so that through the greatness of the not-self the boundaries of the self are enlarged. Through the infinity of the universe which the mind contemplates it achieves something of infinity, but achieves it only if it is permitted no share in the object of its contemplation.

In the mystic and the artist alone has life succeeded in contemplating the real in this way. But while the mystic through superior natural endowment, improved by training and discipline, attains to a more or less continuous vision of the real, the vision

[1] I have used the expression 'genius' to denote the originator of new ideas which are the forerunners of life's advances, rather than the seer who experiences an intimation of the reality which is its goal. Schopenhauer's genius is my artist; the names only are different.

of the artist comes to him only in intermittent flashes which pass away before he can fully realize the nature of that which they reveal. The artist, to use Plato's simile, emerges blinking from the cave and seeks to look upon the sun, but he cannot for long bear the light outside, and so, willy-nilly, he is forced to withdraw again into the semi-darkness of the cave. But while the moment of vision lasts he is transported with delight at what he sees, and strives to hold fast the beauty whose vision is vouchsafed to him. And when the vision passes, he is filled with longing and regret, and finding that his eyes are sealed and that he can no more look upon that which filled his being with delight, he strives to embody the shapes and forms of the world he has seen in the material that lies to his hand. And so he creates a work of art in which there is manifested in a material mould the pattern of the reality which has appeared to him in his vision.

A work of art thus represents the artist's attempt to crystallize in a permanent form and shape the content of a fleeting vision. It is a witness not so much to the artist's present inspiration, as to the inspiration that was once his but has failed him; it tells us not of something that he has, but of something that he has lost and tries to recall. If the artist could retain his vision of the real, he would not trouble himself with the making of images. It is because he has lost reality that he strives to memorize it; it is because he can no longer see the original that he makes the copy. Thus a work of art is an embodiment of a memory rather than of a vision; it is the product not as Wordsworth suggests of emotion recalled in tranquillity, but of remembered emotion which we have sought and failed to renew.

As a typical example of the process I am trying to describe take Beethoven announcing, or rather trying to announce, the motif of an air. The tentative and hesitant character of the music suggests the uncertainty, the angry bewilderment almost, of one who has found something only to lose it again, and is striving in a frenzy of impatience to summon and to hold as much of it as he can recall before it shall have gone from him utterly. As he struggles to remember there come to him a few notes, or it may be a bar, or sometimes even a whole phrase, fugitive threads of beauty's robe which he has snatched at and caught as she passed. Like heralds of a coming storm the phrases occur more frequently, gaining with each repetition in clarity and assertiveness. Presently they begin to catch and link on to one another, and then quite suddenly something happens; there is a burst of melody, the period of travail is over, doubts and hesitations are thrust aside,

and the whole air, unerringly remembered, breaks upon us in all its glory.

We are accustomed to say that the artist creates or interprets beauty for the benefit of mankind. In so far as the phrase purports to describe the motive of his work it is misleading; the artist creates because he seeks to make clear to himself and to cast into a semi-permanent form his vision of the real. It is nevertheless a fitting description of its effect. What the artist does is to enable ordinary men and woman in whom life has not yet emerged beyond the level of awareness of subsistent objects, to enjoy as it were by proxy the reality which he has himself glimpsed directly. He copies what he has seen and they, catching for the first time the outline of reality in stone or paint or music, experience the unique emotion which the real arouses. Thus the artist is the midwife of the real, who brings beauty to birth, albeit obscurely shadowed forth in material form, in the lives of common men.

Aesthetic emotion is the emotion we feel for reality, and, as I have said, it is unanalysable and unique. We can nevertheless distinguish two of its characteristics. In the first place it brings with it a sense of freedom and release; in the second, it is fleeting and evanescent. As instruments of evolution we are in our day-to-day existence mere channels through which flows restlessly and unceasingly the current of life. We are a surge of impulses, a battlefield of desires, over which we can only at length and after a lifetime of setback and of struggle obtain a degree of mastery through the achievement of self-discipline, which is itself the outcome of desire made rational. Wishing, fearing, craving, hoping, and willing, we may never, except in the rare moments of aesthetic enjoyment, be at rest. We must be for ever doing and stirring, improving and making better, meddling and changing. It is one of the paradoxes of our nature that we cannot even love a thing without seeking to change it, and by changing it to make it other than what we love. The greatest lovers of mankind have been those who have spent their lives in the endeavour to save mankind; and since they have always insisted that mankind could not be saved except it repented, to save man was to alter him. A man cannot love a woman without seeking to mould her nearer to his heart's desire, or a child without trying to form it upon himself. We cannot love the countryside without pruning and clipping, smartening and tidying, making meaningful and useful what has achieved beauty by haphazard, and imposing order upon the sweet disorder of nature. We cannot love a tree or even a stone, but sooner or later

we must be pruning the tree or chipping a piece off the stone. We do these things because of the overmastering impulsion of our wills, yet were it not for our wills we should cease to be. Thus for so long as we live, we must conform to the bidding of the Life Force, so that however we love and whatever we love, it can be for a few moments only, and to buy off our will for these moments we have to relinquish what we love to it, to change and alter as it needs must for the rest of our lives.

This, then, is the law of our being as units of the stream of life, that we should be for ever changing ourselves, and seeking to change the world around us. But this law, which is the law of life as evolving to an end, is not the law of life which has achieved the end. And so there is even now an exception to the law, in virtue of which we partake, if only for a moment, of the rest and freedom which it is the object of life to win permanently and to win for everything that is living. In the appreciation of music and of pictures we get a momentary and fleeting glimpse of the nature of that reality to a full knowledge of which the movement of life is progressing. For that moment, and for so long as the glimpse persists, we realize in anticipation and almost, as it were, illicitly the nature of the end. We are, if I may so put it, for the moment *there*, just as a traveller may obtain a fleeting glimpse of a distant country from a height passed on the way, and cease for a space from his journey to enjoy the view. And since we are for the moment *there*, we experience while the moment lasts that sense of liberation from the drive of life, which has been noted as one of the special characteristics of aesthetic experience. We who are part and parcel of the evolutionary stream stand for the time outside and above the stream, and are permitted for a moment to be withdrawn from the thrust and play of impulse and desire, which are our natural attributes as evolutionary tools. For so long as we enjoy our vision of the end, the Life Force lets us alone. We feel neither need nor want, and, losing ourselves in contemplation of the reality beyond us, we become for the moment selfless. And it is of this I take it that Schopenhauer spoke, when he said that the Will uses the intellect always as its servant except in aesthetic contemplation. When we experience those significant combinations of forms or sounds to which we give the name of beautiful in art, our contemplation is Will-less in its character. The object of aesthetic contemplation is something framed apart by itself, and regarded without memory or expectation simply as itself, as end not means, as eternally self-sufficient and universal. In so far as we are able so to view it, we cease for the moment to be

individuals, mere tools of the Will, and take on a character of universality from the universal nature of that which we contemplate. The form is pure universal, and he who would know it must in knowing partake of its nature.

But if, in aesthetic experience, we are like travellers, resting on our journey and refreshing ourselves with a view of the goal to which our steps are directed, we may not rest for long. The Life Force has created us for a purpose, and it cannot afford to have us dallying by the roadside. Indulgence in aesthetic experience is, from the point of view of the Life Force, a form of idling, a playing truant when we should be at school. 'Biologically speaking,' says Mr. Roger Fry, 'art is a blasphemy. We were given our eyes to see things and not to look at them.' [1] Thus life takes care that at an early age we shall attain to a considerable ignorance of the visual appearance of objects. We see and we are meant to see only so much of them as serves the purposes of living. To see them whole and to see them round as the artist does, to see them above all as combinations of significant forms, is a kind of seeing for which those who are preoccupied with the business of living cannot afford the energy or the time.

We are all familiar, to take the matter at its lowest, with the limitations of the sense of smell. Agreeable odours please us only fitfully; the sensation comes as a surprise, a pleasing shock, and is quickly gone. If we attempt to hold it by deliberately smelling a fragrant flower, we begin to have a sense of failure as though we had exhausted the pleasure, keen as it was a moment ago. For this failure to retain there is no doubt a physiological basis; a nerve is tired and requires an interval of rest before it can be freshly stimulated. But for us the distinction between psychological and physiological occurrences in the last resort breaks down. Each type of occurrence resolve itself into a form of awareness, and so, when we turn to what passes for a more spiritual because more developed faculty and consider the sense of sight, we find, though in a less marked degree, the same evanescence in aesthetic pleasure. We look long and steadily at a thing to know it, and the longer and more fixedly we look the better, if it engages the reasoning faculties; but our aesthetic pleasure cannot be increased or retained in this way. To gaze fixedly at the most beautiful object in nature or art does but diminish the pleasure. Practically it ceases to be beautiful, and only recovers the first effect after we have given ourselves an interval of rest. If we would get the keenest visual pleasure we must look, merely glancing as it were, and look again,

[1] Fry, *Vision and Design*, Chap. IV, p. 47.

and then again, receiving at intervals the image in the brain even as we receive the perfume of a flower; and the image is all the brighter for coming intermittently.

That it should be at once unexpected and intermittent is characteristic of our pleasure in the beautiful in whatever form it is presented. Beauty always takes us as it were by surprise, whether it comes to us as a sudden view of a landscape, as a harmony of shape and line, or it may be as music heard by chance from an open window in the street. Nor is the reason far to seek. Aesthetic apprehension is unconditioned by considerations of space and time, and unrelated to the purposes of life; for this reason we are not allowed to indulge it overmuch. And so, before we are even fully assured that the vision of beauty is ours, the Life Force catches us up and thrusts us back into the whirlpool of want and need, of striving, loving, and fearing which is life. And this no doubt is the reason for the fleeting and ephemeral nature of even the most lasting aesthetic experience; to this it owes its unsatisfactory and tantalizing character. There is no sky in June so blue that it does not point forward to a bluer; no sunset so beautiful that it does not awaken the thought of a greater beauty. The soul is at once gladdened and disappointed. The veil is lifted so quickly that we have scarcely time to know that it has gone before it has fallen again. But during the moment of lifting we get a vision of a something behind and beyond which passes, before it is clearly seen, and which in passing leaves behind a feeling of indefinable longing and regret. Only the mystic achieves a vision which is in any degree lasting, and for that vision he pays the inevitable price.

And strangely, the longing and regret is for what is somehow familiar. There is an element of nostalgia in aesthetic experience which finds expression in philosophies of pre-existence, from Plato's theory of *ἀνάμνησις* onwards. The vision which is so tantalizingly vouchsafed to us is of a place to which we have already been, and from which we should never have been parted. So strong is this feeling that not only while it persists but even after it has passed, it brings to some the conviction that what they have so briefly seen is in some sense their real home, the place to which they have at last returned after a long absence; and, as the vision passes, they are filled with sadness at returning again to the world of their exile. Whether this characteristic of intense aesthetic feeling does, as Plato thought, point to the pre-existence of the soul in the real world or whether, as I should prefer to say, it is a testimony merely to the compelling power of reality, a power

which invests what is seen but once with the quality of friendliness and welcome of old familiar things, is a question which I cannot hope to answer. I mention this feeling of nostalgia, because so many of those who have enjoyed intense aesthetic experience in the contemplation of art or nature insist upon it; not because I hope to explain it.

That all moments of intense aesthetic pleasure do possess the two characteristics I have noted: that they bring a sense of freedom and that they pass with a tantalizing evanescence, is, I think, undeniable. And the two characteristics are directly derivable from the nature and purpose of life as I have conceived them. Their explanation is to be sought in the fact that life, which lets us go for a moment, cannot afford to spare us for long. Having created us for the performance of a special purpose, it cannot suffer us to behave as though that purpose were already fulfilled. We are means and may not act as though we were ends. For the same reason it does not permit us to lie in wait for the moments of vision. To be ever on tiptoe awaiting the revelation of beauty would be once more to withdraw ourselves from its service; we are made to work upon the earth and not to spend our time gazing at the stars. Hence the coming of beauty is always unexpected; the form surprises you but you do not find it. The moments of vision cannot be commanded, and once achieved they cannot be repeated; you may look again at the beloved picture, you may hear a second time the symphony that left you entranced, but there is no recapturing that first early thrill when for a moment the gates were opened and the world of everyday passed utterly away. We cannot dictate to beauty when she shall appear; we can neither stay nor recall her; all that we can do is so to live our lives that there shall be nothing to frighten her away.

My theory of aesthetics asserts, then, that art is a schoolmaster to bring us to reality. Whereas for the artist it is quintessence, for life it is only a guide. Although the vision of the real world is not for us yet, but is rather the bourne of the journey upon which we are engaged, premonitory glimpses are vouchsafed to the musician and the artist in which something of its nature is revealed. In order to make permanent the vision they have seen they enshrine it on canvas, in stone, or in sound, and in so doing turn the eye of the soul in those who experience their work to the Forms of the real world. Thus the artist achieves, and helps us to achieve, through the medium of the senses, the vision of reality which will one day be revealed direct to the mind. And, since the mystic may be regarded as one who achieves this direct vision in the present,

although illicitly, as I shall try to show, art may be regarded as propaedeutic to mysticism.

In attributing to art a role of such importance in the scheme of evolution I am following in the steps of most modern thinkers; although it is significant that those who share my view of life as a changing and evolving force are less inclined to find metaphysical significance in art than those who, like Professor Whitehead, regard art as a direct revelation of value. The nineteenth century, dominated by the outlook of materialist science, resolutely refused to regard value as inherent in reality. Scientists in general are still inclined to belittle value, and those philosophers who are most directly influenced by modern scientific thought have shared their disdain. This is true even of Vitalists, who are the first to repudiate the materialism of the scientists. Values for them are subjective, the expression of an accidental characteristic of the human mind, but have no cosmic significance; art exists to provide a certain kind of emotion which may or may not be unique, and its value is relative, therefore, to its success in arousing this emotion. I, on the contrary, hold that the function of art is to communicate knowledge of the most important kind. It is in my view the only source from which the most of us obtain an intimation of reality, the only avenue through which we can apprehend the existence and nature of objective value. Such an attitude is, I affirm, fundamentally a realist one, in that it recognizes and allows for the significance of the full concrete fact of experience. Aesthetic experience does reveal something to us, the character of which is felt to be at once unique and independent of ourselves, and any attempt to explain away this element by resolving it into factors of a different kind is to falsify the full significance of the fact of which we are aware.

This fact and all that it implies is more often than not 'distorted', to use Professor Whitehead's phrase, 'in scientific analysis',[1] and my claim for the major importance of art considered as a form of knowledge as compared with science, rests upon the contention that, while art reveals the concrete fact of value in all its significance, science too often makes an arbitrary selection from the real in the interests of preconceived canons of intelligibility, which have a purely subjective validity.

2. *The poet.* It remains to bring the poet within the bounds of my scheme. My discussion of poetry in Chapter V was left unfinished; poetry, I could not but admit, was capable of arousing genuine aesthetic emotion, yet no provision was made for this,

[1] Whitehead, *Science and the Modern World*, p. 132. See also ibid., p. 232.

which many would regard as its distinguishing characteristic, in the account I gave of poetry as a special branch of literature, performing as such an essentially didactic function. I am now in a position to complete my account by defining the relation of poetry to the world of value.

Let us first see how far the previous account carried us. Poetry, I said, was essentially a structure of words, and the function of words is to convey meaning; poetry, therefore, works in a subject-matter whose nature it is to be meaningful. It follows that, however unimportant be the meaning conveyed, the element of meaning in the total poetic effect can never be eliminated; thus poetry, whether it will or no, must always be giving information and communicating ideas; it is charged with an intellectual content and can never, therefore, arouse pure emotion.

When I say that something has meaning, part of what I imply is that it can be intelligibly described in terms of something else. Now the world of value is unique and cannot be described in terms of anything except itself; it cannot, therefore, be described in terms of the world of becoming; therefore the world of reality is meaningless. To say that reality is meaningless is tantamount, therefore, to asserting that no account can be given of it in words, since it is the essence of words to have meaning. It is for this reason that I have maintained in Chapter VI that music, whose function it is to reproduce in a material form the combinations and patterns of the real, is meaningless.[1] From these considerations it follows that poetry, whatever may be the nature of its subject-matter, cannot, in so far as it has meaning, be concerned to reproduce reality or the world of value; its primary function is not, therefore, to arouse aesthetic emotion, which is the emotion we feel for the likeness of reality. It is not denied that it may stand in *some* form of relationship to the world of value, and, in so far as it is so related, it may arouse aesthetic emotion, but the relationship is accidental and not necessary, and the production of aesthetic emotion is not, therefore, part of the necessary or intended effect of poetry. And when we come to examine the practice of the poets we find that they do in fact concern themselves with the sights and sounds, the passions and desires of this world, and that their poetry arouses, therefore, emotions of the same kind as those which are aroused by the events of the world. The circumstance that the emotions aroused by poetry are purer than those which we feel for life, because they are not distorted and obscured by the introduction of the irrelevances which attach to real as opposed to literary

[1] Chap. VI, pp. 285 and 286–292.

events, though important, is not strictly relevant to the present issue, and should not blind us to the fact that they are emotions of fundamentally the same type as those which life evokes. What is relevant is the fact that it should be possible to hold a theory, such as the theory of Aristotle's *Poetics*, which definitely assigns to tragedy the function of arousing and so working off emotions like pity and terror, which are essentially emotions felt for the things of this world.

Hence I was led to the theory of poetry as an instrument of evolution, designed to give conscious expression to the instinctive purpose of the Life Force. I did not deny that poetry had beauty, but I affirmed that the function of beauty in poetry was to secure attention for the ideas and emotions it conveyed, ideas which were rarely original but were such as had been announced before and ignored. I have now reached a point at which I can attempt to define what is meant by the 'beauty' of a work of art. According to my definition the beauty of what is called artistic creation is the quality which attaches to it in virtue of the fact that it reproduces or reflects the patterns, forms, and rhythms of the world of value, and I say that it possesses this quality because the artist has had intermittent experience of the world of value. Has, then, the poet this experience? I can only affirm that, in so far as his poetry is beautiful, he has. What, then, becomes of the distinction between poetry as an evolutionary device and art as a mirror of reality?

To the poet, I conceive, as well as to the artist the vision of reality is in some degree vouchsafed. But the poet is used by the Life Force in a way in which the artist is not. To explain what I mean by the word 'used' I must introduce a conception which may, I fear, seem fantastic; nevertheless, without it I find myself unable to account for the curious midway position which poetry occupies between the world of becoming and the world of being, between activities which are susceptible of an *ab origine* explanation and those which demand a teleological. I would suggest, then, that while the artist is left undisturbed in the memory of his vision to reproduce it as and when he pleases, the poet's vision of reality is definitely exploited. When, that is to say, the poet is impelled to communicate in words the ideas and sentiments in the delivery of which his mission consists, the Life Force takes advantage of his capacity for apprehending the real to clothe them with beauty. Poetry, too, is instinct with the memory of the forms, sounds, and rhythms of the world of value; but these are reproduced not, as in the case of the artist, for their own sake because the artist seeks to crystallize a fleeting vision in a permanent mould, but because

the beauty with which they invest the poem furthers the fulfilment of the purpose which its author has been created to serve. This is not to say that the poet consciously adorns his meaning with graces of imagery and diction, and informs it with the lilt of rhythm in order to render it more effective. No doubt he does this on occasion, but there are many poems which, so far as the poet's conscious aim and endeavour are concerned, bear witness, like the picture or the musical composition, to a single desire to reproduce the vision of beauty for its own sake.

It is the Life Force which steps in to borrow, as it were, the vision of beauty which its individual unit has achieved, and proceeds to utilize it for the advancement of its own purposes, with the result that instead of being left to design patterns and forms and rhythms which will merely reproduce the real, the poet is impelled to employ the forms that mirror the world of being as a mould or framework for the meaning that belongs to the world of becoming. The Life Force, that is to say, exploits the capacity to contemplate beauty which emerges in the poet, to give power and attractiveness to the message in which he is impelled to convey its intention.

Only on some such assumption as this can we explain the fact that the poet who, like the artist, has been privileged to enjoy a vision of the real world, should nevertheless concern himself with the affairs of this one; that he should, as it were, deliberately descend into the cave, and use the light which he has borrowed from above to make the images and representations of the cave shine the more clearly before the prisoners. Yet this is what he must needs do, since from the very fact that he uses words as his medium, the subjects about which he writes must be those which appertain to the world of becoming. Thus poetry is a hybrid; it appropriates the values of one world in order to advance the purposes which belong to another.

This, then, is the distinction that I am trying to establish between the artist and the poet, that while the former makes images of the real world for their own sake and his delight, the latter uses his vision of the forms and rhythms of the real to create a framework of beauty in which to convey the message of life as a whole to its individual manifestations.

I have found difficulty in giving a clear account of this distinction, and in order to throw into relief the different functions which I conceive the poet and the artist to perform, have drawn the line between them with greater definitiveness, perhaps, than the facts warrant.

For on a further examination hints of a possible reconciliation begin to appear. First, from the point of view of my theory, the end to which the message of the poet is a means and which his vision of the real is used to further, is the advancement and enrichment of life as it is manifested in the individual monads who are his contemporaries. This general advancement and enrichment is itself but a means to the achievement of a higher level of existence at which beauty is revealed to life as a whole, permanently and continuously. Thus the *ultimate* end which the poet's vision of beauty brings nearer is nothing less than the general apprehension by life as a whole of that beauty which is now revealed intermittently to individual artists. Secondly, in actual practice we find that the line between poet and artist is constantly crossed: there are musicians, as I have already pointed out, who use music as the writer uses literature to arouse emotions of the same kind as those which are felt for the things of this world. The emotions aroused by such music are literary; we are reminded by it of past experiences; we relive past delights, are harrowed by forgotten pangs or soften to old regrets, as we float away upon a sea of sound in which this world grows vague and shadowy, but does not make way for the vision of another. It is only a very small proportion of music that reflects the artist's vision of reality, and it is only on rare occasions that the listener is able to perceive its significance; comparatively few works of art are in any event capable of arousing aesthetic emotion, and these do so but rarely. Similarly with painting; the picture which inevitably starts with a representation of sensory objects, too often remains content merely to represent. It presents, that is to say, the objects of this world not as a combination of significant lines and shapes, but as objects which are attractive or intriguing. The contemporary view of pictorial art still regards the representation of nature as its main function.

From the other side we have what is known as pure poetry, poetry, that is to say, of pre-eminent beauty, in which the element of meaning has so declined that it seems difficult to believe that the poet is telling us anything at all, and is not merely the designer of a lovely pattern achieving a formal symmetry and harmony of words, as music achieves a symmetry and harmony of sounds. The element of meaning is of course there, but it has become submerged in the beauty with which the poet has surrounded it. We may say of poets of this kind, of the Herricks and Marvells of literature, that in borrowing the poet's vision and turning it to its own uses, the Life Force has chosen an instrument too fine for its purpose. A faint vision faintly remembered is sufficient to invest the mean-

ing of poetry with an indefinable charm, so that we delight we know not how or why in reading the lovely lines; but sometimes the memory is too vivid and compelling, and instead of subordinating his sense of remembered value to the meaning that the Life Force would have him convey, the poet so drenches his lines in beauty that our senses are enthralled by sound when our minds should be enriched with ideas. The distinction I have tried to establish is not, therefore, clear-cut; it is blurred from both sides. But that there is a distinction in the sense that music and painting at their best, and prose and poetry at their best, perform radically different functions and are set over against different types of being, I am convinced.

3. *The mystic.* It is not possible to give a detailed account of the part played by the mystic in the evolutionary scheme, simply because mysticism from its very nature cannot give an account of itself. If mysticism could give an account of itself, it would cease to be mysticism. The mystic's inability to justify or even to communicate his experience follows necessarily from its character, which is that of an intuitive vision combined with an unalterable conviction of its truth. So convinced is the mystic of the 'truth' of his experience that the question whether it is a revelation of an objective reality, or merely the projection of a subjective hallucination, a question with which modern psychology is increasingly concerned,[1] is one which it never occurs to him to ask. I have myself in talking to an Indian mystic found the greatest difficulty in making him realize that such a problem can exist, that the intensity of the conviction of reality can ever be otherwise than a sufficient guarantee of its validity; that, in other words, it can fail to establish the existence of the reality of which we are convinced. Nor is there anything unreasonable in this attitude. The most logical train of thought, the most objective scientific analysis ultimately rests, as I have tried in Chapter III to show, upon a basis of faith, faith in the one case in the validity of the reasoning process, and in the other in the rationality of the order of nature, and it may well be that such a feeling of faith is for human beings the ultimate (because the only) test of truth. Just as the final criterion of beauty in art is aesthetic and of rightness in conduct is moral feeling, so the final criterion of validity in mystical or metaphysical judgement may be a feeling of direct certitude. If, then, beliefs which are established by what is called logical proof or by the evidence of scientific experiment, are established by

[1] See, for example, Professor Leuba's book, *The Psychology of Religious Mysticism.*

a process which is found in the last resort to rest upon a feeling of conviction, are we not entitled to accept this feeling as a sufficient guarantee of the validity of the judgement it supports in cases which are not susceptible of logical proof or experimental verification? No doubt on general grounds we are. But there is a difficulty. The logician can give an account of his reasoning, the scientist of his experiments, and by so doing they exert an influence over the minds of others, and induce them to share their conclusions. But we cannot expect the feeling of conviction to carry weight among persons other than those who experience the feeling. As William James puts it, 'Mystical states, when well developed, usually are and have a right to be absolutely authoritative over the individuals to whom they come. No authority emanates from them which should make it a duty for those who stand outside of them to accept their revelation uncritically.'[1]

For this reason the mystic must remain enclosed within the circle of his own convictions. These convictions he will fail to communicate to others in proportion as other lack the experience upon which they are based. He cannot even describe the nature of the real which has been disclosed to him, because what is unique and other-worldly cannot receive a meaning in terms of the experiences appropriate to this world. When he attempts to do so he falls into the flagrant and admitted self-contradiction implied in such statements as 'a delicious desert', 'a dazzling darkness', 'it neither moves nor rests' which are typical of mystical utterances. The mystics have frankly admitted an ignorance which should be interpreted rather as an inability to express. 'Nescio, nescio, quae iubilatio, lux tibi qualis', said Bernard of Cluny. The essential incommunicability of the mystical experience is thus due to its subjective character, which is at once personal and intuitive, and to the character of its object which is other-worldly.

Tolstoy's description in *A Confession* not of the experience but of the way in which it came to him, affords a good example of this twofold characteristic. For Tolstoy the mystical experience is primarily the solution of a problem, the problem of the meaning and justification of sin. All purely intellectual answers to this fundamental problem were rejected by him as unsatisfactory, the actual solution being suddenly revealed to him in a series of mystical experiences which he compares to repeated flashes of inner light. Tolstoy emphasizes the point that the whole of his previous intellectual life had led up to this revelation, from which it was, nevertheless, logically separated. Because of this separateness the

[1] *The Varieties of Religious Experience*, pp. 422–3.

true solution cannot be preached or demonstrated; it can only be revealed to others, as it was to Tolstoy, in a personal revelation.

And so it is that the mystic resorts to metaphor and simile, striving to convey in verbal images an impression of that which, except it be mirrored in the work of the artist, is essentially incommunicable. Tolstoy speaks in fables, Christ in parables and dark sayings: 'Unto everyone which hath shall be given; and from him that hath not, shall be taken away even that which he hath', remains a stumbling-block to this day, and is only intelligible on the assumption that it was addressed to those who had eyes to see and ears to hear, that is, to those who shared Christ's vision of what he called the Kingdom of God.

If the mystic is unable to make plain to others the nature of his experience, or to convince them of its validity, it is not to be supposed that such a task can be undertaken by another. I content myself, therefore, with indicating two characteristics of mysticism which have a special relevance to the preceding argument. The first concerns the relation of the mystic to the artist. I have defined art as the elementary study of reality; as such it is a step towards mysticism. The artist stands to the mystic in the relation of pupil to teacher, achieving in a rudimentary and uncertain fashion what the mystic carries through with the assured touch of the expert. But in what way, it may be asked, is the mystic higher or more advanced than the artist? In a famous passage in the Sixth Book of the *Republic* Plato describes the ascent of the soul through the world of appearances, until it comes face to face with the Forms, finally rising to an apprehension of the Form of the Good itself.[1] The various stages of being which the soul successively apprehends may be likened to the rungs of a ladder, each one of which, as it is reached, affords a vantage ground for the ascent of a higher rung. Once at the top the philosopher dispenses with the rungs by the aid of which he has climbed, and, descending once more into the world of appearance, is enabled to understand the true nature and relation to the Form of the hypotheses by means of which he has previously ascended.

It is to a similar conception of higher and lower in the scale of the apprehension of being that I wish to have recourse in describing the relation between the artist and the mystic. The artist's vision is inferior in two ways. In the first place, he sees only in intermittent flashes which he can neither command nor retain, while the mystic contemplates more or less continuously and, in the case of some of the most successful mystics, has even been

[1] Plato, *Republic*, 511.

able to summon at will. It is because his vision is intermittent that the artist is driven to reproduce what he has seen in a physical medium, in order that he may enjoy it when the original is no longer available. We say that the artist mirrors reality in a physical medium because, in so far as he embodies his vision in sound or paint or stone, he must employ material; the use of material is indeed a necessary condition of his reproducing at all. But the artist's preoccupation with material is not confined to the reproduction of his vision in a work of art; more often than not, in all indeed but the rarest cases—and this is the second condition of inferiority—the vision itself is of the sensory rather than of the real world. A landscape, a river, or a mountain, colours, strange dyes, or curious odours, even the familiar objects of the kitchen or the dining table, may equally with the picture or piece of music reproduce or imitate the patterns of the real, and most artists seem, as I pointed out in Chapter VI, to find their inspiration in the contemplation of such external objects. In virtue of their gift of vision they see the object as a combination of significant forms, and in virtue of their gift of execution, reproduce it in such a way that its significance becomes visible to those less fortunately endowed. This power of detecting the forms of the eternal reflected in the temporary is as far as the artist's vision normally carries him. Sometimes, however, the artist, especially if he be a musician, ascends to a direct vision of the real world. Dispensing like the mystic with the rungs of the ladder up which he has climbed, he enjoys like him a vision not of the accidental copies of reality, which the permutations and combinations of the infinite forms of the sensible world may from time to time achieve, but of the real itself. For so long as this vision lasts, he apprehends directly with the mind that of which he has previously known the reflection through the senses, and for so long as he apprehends, he is on the level of the mystic. He falls below him only in so far as being unable to retain his hold on the real, he finds it necessary to create in order to make for himself a perpetual reminder of what he has seen and lost. Of this direct experience, however, even the musician is rarely privileged to partake; normally he perceives through the medium of the senses the copies of reality which are mirrored in the stuff of the material world.

But although the mystic is higher than the artist in the sense we have described, although he apprehends reality directly with the mind and maintains a view of it, which is steady and clear and does not fade and falter coming like the artist's through the fluctuating medium of the senses, yet is he not the gainer. The

contemplation of reality involves, as I have pointed out, withdrawal from the stream of life; while we view the real, we are engaging in advance in that ultimate pursuit in which life will come to rest, and, for so long as the vision persists, we are free from the solicitations of life. Yet we are creatures of life, created by life for the fulfilment of a purpose, which is not for us the contemplation of reality, but the advancement and enrichment of life in the world of becoming. It is true that it is to achieve this contemplation that life seeks to advance and to be enriched, but the time of its achievement is not yet. In order that the purpose of evolution may be realized, life as a whole must emerge at a level of continuous contemplation of the world of being, and the end is not attained so long as the vestiges of its passage through the world of becoming remain.

In these circumstances the achievement by an isolated vital monad of that direct and untrammelled contemplation which is the end of life as a whole is premature, premature because life is not yet ready for the permanent vision of the real, premature because it withdraws the individual who achieves it from the service of life. Thus the mystic is at once an unprofitable servant and a precocious child. As units of life we enjoy a privilege and confess an obligation. The privilege is the high nature of the task on which we are engaged and the splendour of our experience as we bend to it; the obligation, that we should do our utmost by living our lives of effort and endeavour to advance the purpose for which we are created. To subtract our energies from the immediate service of life, and to concentrate them upon a prize which is for the winning only when the race is done, is 'on this short day of frost and sun, to sleep before evening'. Nor is life indifferent to the betrayal of its purposes. If the monad's diversion of the stream of life persists, the stream is cut off at the source; if the mystic continues to withdraw from life, life withdraws from the mystic. The road to the Kingdom of Heaven is narrow, and blessed are they who find it, but blessed only if, having found it, they do not travel it to the end. To drink deep of the mystic's cup is to paralyse the energies of life. Art which shows us for our refreshment and our joy the images and reflections of the real, introduces us to the world of value in the only form in which life permits us as yet to know it. Reality seen intermittently and seen through the veil of becoming is wholesome and acceptable to our present state. We are of the earth earthy, composite beings weighed down by matter, a race of makeshifts enjoying a precarious hold on existence for so long as we continue to further the purpose

for which we are created. We have a leasehold rather than an ownership in life, and if we aspire above our status and, instead of bearing the heat and burden of the day, stand idling by the roadside indulging in the contemplation of the goal, our lease is terminated.

Western mystics instinctively realizing this truth have retained a hold upon the world of affairs, looking upon mysticism not as a permanent vocation but as the joy and refreshment of a life of effort and endeavour. But it is a truth which the mystics of the East have missed, or if they have known it, have deliberately ignored. They have found the assurance of salvation or the practice of religious contemplation so far transcending in rapture the delights of this world, that they have 'made themselves eunuchs for the kingdom of heaven's sake', and in thus expressing their contempt for so-called earthly value, they have neglected even good works and the ordinary observances of religion. In them is to be seen that turning against itself of the will to live of which Schopenhauer spoke, with the result that, as he withdraws himself increasingly from the burden of living, the life of the Eastern mystic gradually ebbs away. He is untouched by desire; he feels little need of food and none of sleep, and the life that is in him finding no occasion for the exercise of its energy, is drawn back to the main stream. Thus the mystic pays in death the penalty of aspiring to a level of consciousness which life is as yet unfitted to achieve.

An allegory. This is as far as direct statement will take us; but following the precedent set by the greatest of philosophers, I will make a final attempt to convey the conception of the universe I have tried to put forward in this book, by way of a myth or allegory. A great commander is desirous of reaching a far country where he may have rest for his body and refreshment for his soul. But being unable to travel or even to move unaided, he hires a company of servants to whom he communicates his wish, hoping that each of them helping a little, between them they may be able to carry him whither he would be. At first the servants are but poor and feeble helpers; they are dull clods, lazy and inert, and, were it not for the spur of their bodily needs they would not advance at all. But driven by hunger and thirst they stumble blindly forward, struggling with one another for what little sustenance they can find; and, as they struggle, the weaker fall out. It is only when they have travelled for long years that they come even to the knowledge that they are on a journey; and this knowledge is vouchsafed only to a few, whose ears are opened to the words of

the commander. To them he speaks telling them the way he would have them go, and they become his messengers to communicate his wishes to the rest, and seeing the next stage of the journey lying ahead, point it out to their fellows and urge them onwards to achieve it. But the behests of the great commander are not welcome to the multitude, who are unwilling to bestir themselves, and for the most part are satisfied to stay where they are, affirming that the point at which they have arrived is the end of the journey, seeing that no place could be better than the one already reached. In any case, they say, the direction cannot be that which the messengers point out to them, since that way lies a precipice over which they will fall and miserably perish. So they try to silence those who urge them forward persecuting them and maltreating them, and in their laziness and timidity seeking every way to save themselves from the necessity of making the efforts demanded of them. Yet because of the seduction and encouragement of their words, because too the way they show is the one way forward which the multitude must take or perish, the messengers presently prevail. Thus each fresh stage of the journey is only achieved through the many being persuaded in the end to follow the guidance of those whom they have first rejected, although it is only after they have killed the messengers that they become convinced of the truth of their words. And, when they have arrived at the place which was pointed out to them, they are again desirous of settling and would stay there always, affirming it to be the best of all places, until a new messenger arises to urge them forward yet again.

Now the road is one that runs between hills along the bottom of a valley, but every now and then there are gaps in the hill through which the country beyond may be seen. And presently there are some, keener sighted than the rest, who, looking through the gaps, catch a passing glimpse of the fair land to which they are travelling. And they are transported with delight at what they see, and would fain stay and enchant their souls evermore with gazing. But this is contrary to the purpose of the commander who hired them, who wills that they should go forward unceasingly with the rest until such time as all have reached the goal upon which his desire is set. So he causes them to turn away their eyes from the land they have seen, and finding that the vision has passed from them, they go forward hoping that at some other place upon the road it will again be granted to them. But meanwhile they are filled with regret and longing for the land they have seen, and try to appease the hunger of their souls by making models and images of the fair

things it contains. These they hold up to the multitude to gaze upon, and they in their turn are filled with delight, although they see but dimly shadowed forth in the gross stuff of such things as can be found by the wayside, the forms and features of the land which the makers of the images have glimpsed over the hedge top. Yet they are heartened by what they see and press forward all the more eagerly, thinking that by this means they will the sooner come to the reality whose image they have beheld in the models. And so it is that the makers of the images of those things that lie ahead in the promised land, also play, although unwittingly, the part of messengers, encouraging and helping forward others by the fair seeming of what they have remembered from their vision. And to some the commander of set purpose vouchsafes a glimpse of the things that lie ahead, in order that they may borrow from them fair images of beauty to clothe the words with which they urge forward the multitude to the next stage of their journey. These too have seen something of the beauty and the wonder that await them, but they are moved not like those others by the desire to make for themselves models of the beautiful things in order that the longing of their souls may be stilled by gazing on the images, but in the hope that their message may catch some gleams of the light they have caught from afar, and that their words may fly winged into the hearts of the multitude.

And there are yet others who have seen through the gaps in the hills, and being transported with the delight of what they have seen, cannot contain themselves, but must at all costs look again. So amazed are they that they give no heed to the voice of the commander speaking to them and bidding them go forward with the others on the journey, but leaving the track they climb with much suffering and labour the hills that encompass it, that they may feast their eyes unhindered on the fair view. And when they remember the road they have left and the struggles and wrangling of the multitude, and how hard was the way and how poor its pleasures, they vow that they will never return to it, but stay always in the place whither they have climbed, resting from the journey and refreshing their souls with the loveliness of the prospect. And so for a time they have great enjoyment, but not for long, for the commander whose voice they heeded not, seeing that they will carry him no farther on his journey, pronounces them unworthy soldiers, truants, and laggards, forgetful of the task for which he hired them. And, like mountaineers who have climbed too high and cannot endure the thinness of the air, he causes them to droop and wither away. Thus are they punished for leaving the broad

highway of life before the appointed time. For the vision of beauty is not yet, nor may she be seen save in fleeting glimpses; beauty is a flower that surprises us, a song that we hear as we pass the hedge, rising suddenly and simply in the night and dying down again. He who tries thus early to catch and hold her, will find that even as he feasts his eyes upon her loveliness, they grow dim and fade in death.

But meanwhile the common soldiers still go forward on the way, and as they grow in stature, they see for themselves something of that view whose outlines the few who went before showed them in their models, and knowing now for a certainty that they are on a journey, and knowing too the goal that lies ahead, they press forward the more eagerly to reach it. And when at last they are arrived, the commander releases them from service, and; at rest now from their journey, they gaze for evermore upon the beauty that lies at the journey's end.

INDEX

Absolute, The, 30, 47, 48, 53, 57, 59, 326, 327, 333, 336.
Ahriman, 39.
Alexander, 79, 146, 342, 357.
Aquinas, St. Thomas, 316.
Arahatship, 370, 374.
Aristotle, 38, 39, 188, 209–10, 317, 402.
Arnold, Matthew, 242.

Bach, 269, 283, 284, 286, 294, 296, 297, 309, 347.
Bacon, 36.
Bayliss, 21, 22.
Becoming, 39, 69.
Beethoven, 226, 239, 244, 246 *n.*, 253, 284, 289, 290, 307–9, 350, 394.
Behaviourism, 27, 315.
Being, 39, 42, 204.
Bell, Clive, 302.
Bergson, 17, 18, 20, 22, 30, 60, 62, 68–71, 73–5, 113, 118, 182, 192, 326, 327, 329, 330, 339, 343.
Berkeley, 4, 49, 96, 99.
Bernard of Cluny, 406.
Bigg, 364.
Blake, 250, 253.
Bosanquet, 47, 48, 50, 54, 55, 328, 329, 334, 355.
Bose, J. C., 148, 149.
Bradley, 30, 47, 111, 316.
Brain, Russell, 24.
British Association, 8.
Broad, 17, 104–6, 159–66, 169, 178, 189, 197, 198, 202.
Brock, Clutton, 349.
Browning, 283.
Bruno, Giordano, 235, 237.
Buddhism, 39, 229, 233, 333, 369, 370–5.
Bunyan, 233.
Butler, Samuel, 103, 148, 174–6.

Cézanne, 239, 269.
Chaminade, 294.
Chopin, 293, 350.
Christ, 229, 233, 236, 237, 321, 367, 409.
Christian Platonists, 41.
Clerk Maxwell, 10.
Coleridge, 308.
Comte, Auguste, 60, 62.
Critical Realism, 84.
Croce, 60–2, 67, 75–9, 267, 290, 329, 339, 343, 354–5, 357.

Dante, 230.
Darwin, 6, 7, 180, 220.
Descartes, 7, 8, 162, 354.
De Vries, 6, 220, 226.
Dickens, 239.
Donne, 230, 287.
Driesch, 15, 16, 17, 196.
Durand, 85.
Durkheim, 175.

Eckermann, 357.
Eddington, 11.
Einstein, 346.
Ellis, Havelock, 223, 235, 236.
Euripides, 230.

Faustus, Dr., 46.
Forms, Plato's, 38, 41 42, 225, 246, 265, 276, 277–83, 326, 335–8, 407.
Forster, E. M., 284.
Frith, 300.
Fry, Roger, 397.

Geddes, 6, 180.
Geley, 17, 157, 170–3, 196, 224.
Gentile, 60, 112, 113, 339, 354, 355.
God, 38–46, 60, 67, 73, 193–5, 203, 230, 236, 309, 313, 314, 321, 333, 364–7, 369, 370, 392.
Goethe, 224, 250, 357.
Good, The, 312, 313, 336, 338.
Green, T. H., 316.

Haldane, J. S., 14, 16, 19.
Handel, 296.
Hardy, T., 250–2, 255–6.
Hartmann, von, 207.
Havelock, Ellis, 223, 235, 236.
Head, Henry, 142.
Hegel, 30, 47, 50, 112.
Helmholtz, 224.
Heraclitus, 62, 66, 326–7, 339.
Herbart, 327.
Hering, 103.
Herrick, 404.
Hesiod, 255.
Hicks, Dawes, 85, 86.
Hobbes, 147, 188.
Holinshed's Chronicle, 257.
Homer, 244.
Hügel, von, 364, 365.
Hulme, T. E., 356, 357.
Hume, 4, 63, 115, 117.
Huxley, T. H., 5, 17.

Ibsen, 233, 237, 250, 256.
Idealism, 12, 82, 88, 353, 354, 356, 358.
Inge, Dean, 366.

James-Lange, Theory of emotion, 149, 150, 151.
James, William, 38, 47, 60, 63, 66, 68, 75, 86, 128, 150, 259, 327, 406.
Joachim, 50.
Job, 369.
Jones, Rufus, 364.

Kammerer, 175.
Kant, 11, 36, 99, 100, 290, 317.
Keats, 231.
Keith, Sir Arthur, 389.

Laird, 119.
Lamarck, 7.
Le Châtelier, 21.
Lee, Vernon, 295.
Leibnitz, 288, 317, 327.
Le Roy, 18.
Leuba, 405.
Lewis, Sam, 289.
Life Force, 184–6, 188–92, 200, 204, 205, 207, 208, 211, 216, 217–24, 226–9, 235, 236, 240, 241, 250, 253, 255, 258, 260, 261, 290, 340, 341, 345, 349, 375, 377, 396, 397, 402–5.
Locke, 4, 49, 63, 92, 99, 354.
Lotze, 99.
Lovejoy, A. O., 331.
Lucretius, 254–5.
Lynd, Robert, 254.

MacDougall, 143, 145.
Manichees, 39, 42, 203.
Marvell, 404.
Marx, 233.
Maya, 41.
Meinong, 109.
Mendelssohn, 294.
Meredith, 216.
Methuen, Sir Algernon, 254.
Millais, 238, 239.
Milton, 230, 244, 254.
Monadism, 197.
Monism, 30, 31, 37–41, 46, 47, 51–3, 56, 57, 60, 73, 77, 81, 333, 336, 364, 365.
Montague, W. P., 126, 127, 128.
Moore, G. E., 130, 274, 363.
Morgan, Lloyd, 157.
Mozart, 226, 239, 240, 307, 309.
Müller, Max, 99, 100.
Mysticism, 363–7.

Needham, J., 14, 16, 17, 21.
Neo-Darwinism, 25.
Neo-Idealism, 61, 62, 75, 77, 333, 340.
Neo-Lamarckianism, 180.
Newton, 232.
Nietzsche, 235, 236, 237, 253, 340–3.
Nirvana, 373.
Nunn, 87, 88, 94, 96.

Occam's Razor, 100, 104, 134.
Old Testament, 228, 253.
Ormuzd, 39.

Pantheism, 43, 365.
Parmenides, 326–7.
Pascal, 237.
Pater, 210, 409.
Plato, 35, 41, 42, 113, 156, 157, 178, 188, 204, 205, 212, 213, 225, 246, 265, 266, 275–85, 288, 289, 305, 322–4, 326–7, 335–8, 347, 366, 393, 394, 398, 407.
Plotinus, 364.
Pluralism, 51, 334.
Plutarch, 257.
Poincaré, Henri, 225, 226.
Positivism, 60, 62.
Pragmatism, 60–2, 65, 86.
Price, 318.
Purcell, 294.
Pythagoras, 288.

Rachmaninoff, 294.
Raphael, 273.
Rashdall, Hastings, 346.
Reid, 317.
Renaissance, 35, 36, 260, 300, 356, 358–61.
Representationalism, 82, 85.
Ribot, 346.
Rignano, 176.
Rivers, 175.
Rousseau, 237, 257.
Royce, 40.
Ruskin, 242, 324.
Russell, Bertrand, 10, 12, 47, 58, 96, 98–100, 351.
Rutherford, Mark, 95.

Sankarachaya, 40, 41.
Satan, 203, 211.
Schiller, 64, 65.
Schopenhauer, 30, 60, 72–5, 138, 146, 193, 196, 201, 207, 210, 211, 253, 290, 292, 298, 308, 326, 327, 340–3, 375, 393, 396.
Semon, 103.
Servetus, 235.

Shakespeare, 245, 248, 250, 256–9, 267, 269, 287, 355.
Shaw, 211, 230, 233, 237, 238, 287, 326, 388–90.
Shelley, 231, 243, 244, 249, 250.
Sherrington, Sir Charles, 19.
Sidgwick, 317.
Smuts, General, 50, 55, 56.
Socrates, 114, 115, 233, 235, 237.
Spearman, 88.
Spencer, H., 17, 56.
Spinoza, 47, 51, 56, 327, 364.
Stout, 165.
Swedenborg, 253.
Swift, 233, 234, 235, 237.

Taylor, A. E., 126, 316–20, 328.
Tennyson, 61, 374.
Theory of Ideas, 41, 275.
Thomson, 6, 180.
Tolstoy, 233, 255, 267–9, 406, 407.
Treitsche, 289.
Trevelyan, G. M., 213
Tyndall, 5, 8.

Utopia, 60, 357.

Vahinger, 62, 66, 67.
Vaughan, 230, 287.
Vinaya, 369.
Vitalism, 6, 12, 18, 21, 23, 47, 65, 72, 162, 213, 333, 371.

Wagner, 240, 298.
Wallas, Graham, 141, 142, 143, 223.
Ward, James, 118.
Watt, James, 232.
Watts, G. F., 302.
Weismann, 6, 175, 180.
Whistler, 239.
Whitehead, A. N., 87, 116, 117, 326, 333, 337, 340, 354, 381–3, 390–2, 400.
Whitman, Walt, 281.
Will (in Hardy), 251–2; (Schopenhauerian), 30, 72–4, 138, 146, 170, 193, 194, 201, 207, 292, 327, 340–2, 375, 396.
Wittgenstein, 353.
Wordsworth, 224, 231, 394.

Zoroastrianism, 39, 42.

PRINTED IN GREAT BRITAIN AT THE UNIVERSITY PRESS, OXFORD
BY JOHN JOHNSON, PRINTER TO THE UNIVERSITY